A TRANSFORMATIONAL ANALYSIS OF CLAUSE CONSTRUCTION IN URDU/HINDI

THESIS SUBMITTED FOR THE DEGREE OF

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IN

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BY

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This is to certify that Mr. Mohd Mashkoorullah Khan Sherwani undertook research on 'A Transformational Analysis of Clause Construction in Urdu/Hindi' under my supervision and guidance. He has completed his research and to the best of my knowledge this is his own work. In my opinion it can now be forwarded to the examiners for evaluation and award of the degree of Ph.D. in Linguistics after evaluation.

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PREFACE

I would like to offer my thank and special gratitude to Prof. Masood Husain Khan, formerly, Head, Department of Linguistics, A.M.U., Aligarh and Ex-Vice-Chancellor, Jamia Millia Islamia, Delhi, for granting me a research fellowship. I am also grateful to my Supervisor Prof. Abdul Gaffar Shakeel, Chairman, Department of Linguistics, A.M.U., Aligarh, for his guidance, supervision and critical suggestions. I also like to thank Prof. Abdul Azim, Dean, Faculty of Arts, A.M.U., Aligarh, for encouraging to take up this study.

M.M. SHERWANI

TRANSCRIPTION AND ABBREVIATION

SYMBOLS:

$\bar{V}$	Long vowel	u	long - bhuk 'hunger'
$\tilde{V}$	nexalised vowel	⟶	consists of or 'may be [illegible] as'
Ç	retroflex consonent	⟹	indicates transformation on structure [illegible]
ch	aspirated consonent	+	joins two items
I	short = dIl 'heart'	*	Indicates unacceptable structure.
U	short = pUl 'bridge'		
i	long = tir 'arrow'		

ABBREVIATIONS:

Adj.	Adjective	perf	perfect
AP	Adjective Phrase	pl.	plural
Adv.P	Adverb Phrase	pres	present
Advers	Adversative	p/phr	phrase
Aux	Auxiliary	pp	post-position
CAUS	Causetive	p phrase	post positional [illegible]
Cl.	Clause	pred	predicate
Comp.	Complement	PV	preverb
CONJ	Conjunctive	R	relative
Cop	Copula	RR	Restrictive Relative
Dat.	dative	S	sentence
Def.	definite	sing/sg.	singular
Dem.	demonstrative	str.	structure
DISJ	disjunctive	sub.	subordinate
Fem.	feminine	T.G.	Transformational Generative
fut.	future	T.Rule	Transformational Rules.
Gr.	grammar		
Imper	Imperfect		
Mas.	masculine		

C_O_N_T_E_N_T_S

INTRODUCTION

THE PROBLEM :

Linguistically speaking Hindi and Urdu belong to the indic branch of the Indo European language family. Historically they come from the same source, but in course of their evolution both the languages have enriched their vocabularies through borrowings from other languages. In particular, Urdu (High Urdu) has not only lexical items from Persian and Arabic but also it has certain grammatical elements which have become an integral part of the grammatical structure of Urdu language. As a result we find certain inflectional and derivational morphemes which in Hindi are not used.

We have traditional grammars of Hindi and Urdu written by Hindi grammarians and Urdu grammarians respectively. In the 19th century, some Europeans also wrote grammars of Hindi and Urdu on the model of English grammar.

In the present century, with the advance of modern linguistics in India, some Indian and foreign linguists have attempted to discuss various aspects of Hindi/Urdu grammars.

MODEL OF THE GRAMMAR :

The present study has followed the model of the T.G. Grammar of 1965, proposed by Noam Chomsky in the 'Aspects of the Theory

of Syntax. Chomsky's T. G. Model of the Grammar of 1965 consists of the following components :

1. Syntactic components
2. Semantic components
3. Phonological components

The syntactic component is further divided into two sub-components : (i) the base component which generates deep structures and (ii) a transformational component which operates on deep structures, and converts them into surface structures. The deep structures provide the input to semantic component for semantic interpretation while surface structures are the input to phonological component for their phonetic representation and interpretation. The semantic and phonological components are purely interpretive; they play no part in the recursive generation of sentence structures. The syntactic component is purely generative which supplies all the information needed for interpretation.

The base contains a 'categorial component', (PS Rules) and a Lexicon. The former contains a set of ordered rewriting rules which provide the recrusive power of grammar and generate trees terminating on category symbols or P- terminal symbols. The lexicon characterizes the individual properties of particular lexical items in terms of an unordered set of lexical entries each composed of a set of features which refer to syntactic features. Lexical features are of three kinds : (i) category features merely indicate the

general category to which a lexical item must belong. Thus, an item with the category feature [+N] or [+V] may be inserted under immediate domination of N or V. (ii) Strict sub-categorization features refer to categorial environment in which a lexical item may occur. For example, a verb can occur with a NP but other can not. Thus, an item with the category feature [+V] and strict sub-categorization feature [+NP ....] may be placed under domination of V and may occur only in environments which include an immediately preceding NP. (The item with these features is a transitive verb). (iii) Selectional features refer to the lexical environment in which an item may occur. In particular to those lexical items with which the item in question has a grammatical relation. If an item is marked with the features [+V] and [+NP ...] as above it may also have the selectional features [± Animate] obj which indicate that it takes only animate or animate object. The content of selectional features is provided by features such as animate or human which supply to nouns. The rules that sub-categorize a symbol in terms of categorial context Chomsky calls Strict sub-categorization rules, and those that analyse symbols in terms of syntactic features of the frames in which they appear he calls selectional rules. Selectional rules, of course impose a corresponding classification on the verb in terms of co-occurrence restrictions between the verbal and subject or object N. It is clear that the lexical features used for subject or object N would be relevant for selectional features.

The following examples illustrate the operations of the syntactic component of the 'Aspect model' :

I. Base

A. Categorial Component

1. S ⟶ NP + VP
2. NP ⟶ (Det) +N
3. VP ⟶ (NP) +V+Aux

B. Lexicon

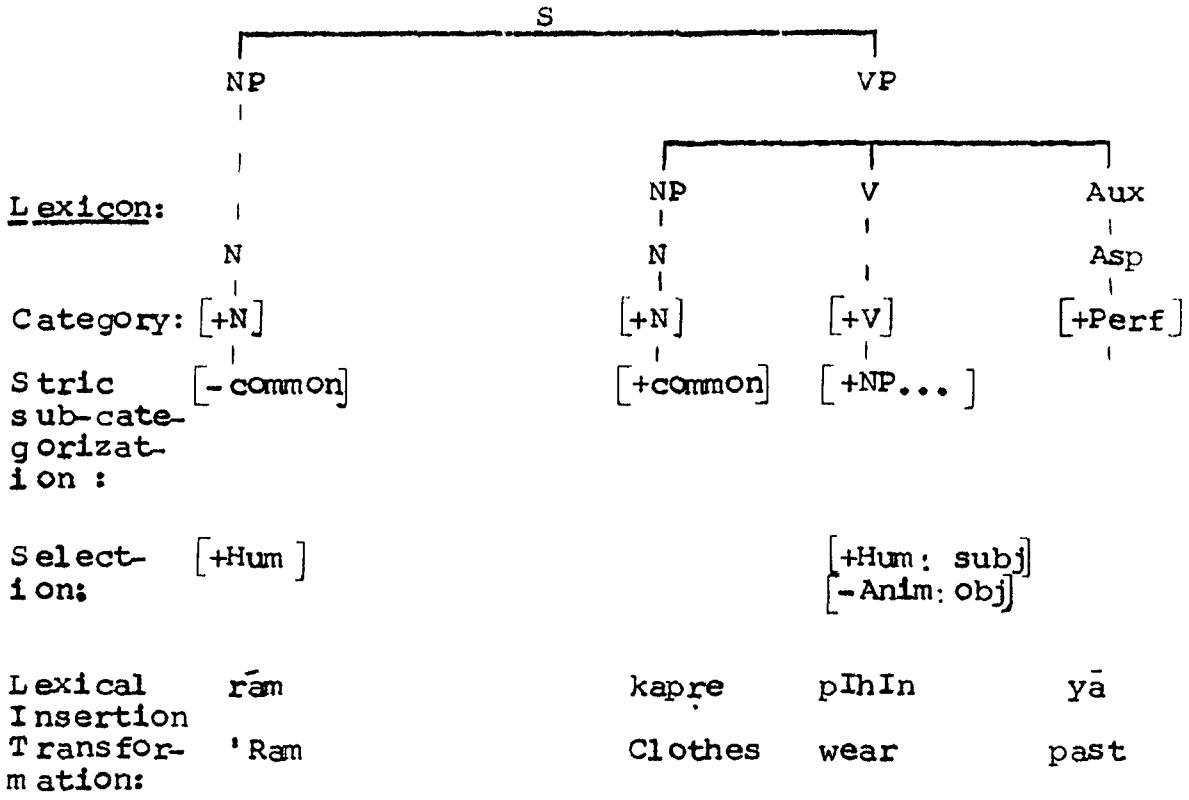
	Category	Strict sub-categorization	Selection
ram 'Ram	[+N]	[-common]	
kapre 'Clothes'	[+N]	[+common]	
pIhIn 'Wear'	[+V]	[+NP ...]	[+Human: Subj]
			[-Animate: Obj]

Other noun features :

[+Animate] [+Human]
[-Animate] [-Human]
[+Animate] [-Human]

Note that the plus [+] and minus [-] signs indicate the presence and absence of features respectively.

The categorial component generates the structures such as :



Lexical items are then inserted by substitution transformation or lexical transformation which take account of the feature specification of each item. Thus, in the example above the terminal string might be 'rām kapṛe pIhIn yā but not kapṛe rām pIhIn yā.

II. Transformational Component :

The deep structure as an out put of the base component enters the transformational component which transformes it into surface structure. Thus, the rules of "Agreement Transformation" and "Agentive ne placement" apply and after phonological interpretation the final form of the sentence might be ram ne kapre pIhIne 'Ram wore clothes'.

In case of complex sentences, the T. Rules apply cyclically to the lowest S of the tree, the next lowest S and soon until the highest S has been reached. This will be accounted in the text.

The Present Study :

The scope of the present study is very limited. It concentrates on the clause constructions in Urdu/Hindi only. Other aspects of Urdu/Hindi grammar are not in the scope of this study. The main aim of the study is to point out clause constructions in Urdu/Hindi which were treated by traditional grammarians in a different way can be analyzed on the Chomskyan model which is more scientific and accurate. Generally our traditional grammars do not go into the details of clause constructions in these languages. The analysis presented in this study, it is hoped, will contribute toward a better understanding of this neglected aspect of Urdu/Hindi grammar. It is not a comprehensive work but it is a beginning toward a comprehensive work in Urdu/Hindi grammar.

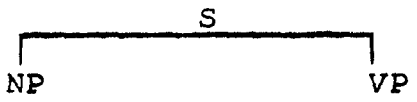
The study is divided into three parts consisting nine chapters : Part one presents an out line of the simple phrase structure rules with reference to the structure of a simple sentence in Urdu/Hindi. This part contains only two chapters : Chapter one discusses the structure of noun phrase and chapter two deals with the structure of verb phrase. Part three gives an account of the clauses combined by embedding rules. These rules are applicable to generate the complex sentences in the following respective chapters : Chapter three describes the

problem of noun modification, chapter four deals with the process of nominalization, chapter five concentrates on the problem of causativization, chapter six takes into account the process of VP-complementation and chapter seven is concerned with the process of adverbialization. Part three is concerned with clauses combined by conjining rules. These rules operate on such structures that yield compound sentences. Chapter eight deals with the process of coordination and finally chapter nine gives an account of comparative constructions in Urdu/Hindi.

PART ONE :

SIMPLE PHRASE STRUCTURE RULES

A simple sentence in Urdu/Hindi consists of two basic constituents : Noun phrase (NP) and verb phrase (VP). If we formulate a rule to explain this fact, this rule would be a kind of model for analysing the whole language. The structural arrangement of the major constituents, i.e. noun phrase and verb phrase may be indicated by a tree diagram as follows :



The rule that represents this tree would state the following :

A sentence consists of a noun phrase plus verb phrase

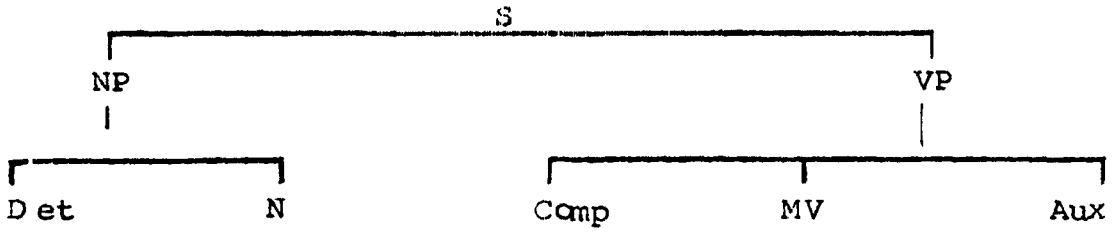
The rule can be abbreviated in the following as :

$$S \longrightarrow NP + VP$$

Such rules are called "phrase structure rules". P phrase structure rules (PS rules) generate the category symbol in terms of rewrite system. They may be shown as follows :

1. $S \longrightarrow NP + VP$
2. $NP \longrightarrow (Det) + N$
3. $VP \longrightarrow (Adv) + Comp + MV + Aux$

The phrase structure rules generate the structures such as :



PS rules deal with the constituents of noun phrases and verb phrases which characterize possible noun phrase constituent structures and verb phrase constituent structures.

The three phrase structure rules discussed above for the possible deep structures of Urdu/Hindi sentences are :

1. S $\longrightarrow$ NP + VP
2. NP $\longrightarrow$ (Det) + N
3. VP $\longrightarrow$ Comp + MV + Aux

The constituent Det is further expanded to provide three basic choices by the following rules :

Det $\longrightarrow$ (Pre-Det) + Common Det + (Post-Det)

As the complement includes some optional post positional phrases, noun phrases and predicates will be developed in chapter-2.

The auxiliary is further expanded into optional Modal and Aspect, and obligatory constituent Tense by the following rule :

Aux $\longrightarrow$ (Modal) + (Aspect) + Tense

The PS rules (categorial component) consist of a set of ordered

rewriting rules which provide the recursive power of the grammer and generate trees whose terminal elements consist of grammatical morphemes and empty categories ($\triangle$).

Under Lexicon we have to characterize the individual properties of particular lexical items interms of subcategorization rules that are inserted in specified position in the base phrase markers. When features analysis is over, the feature contents are replaced by lexical items from the lexicon by "Lexical Insertion Rules" that are technically known as transformational rules, more specifically substitution transformation.

Thus, the base that consists of a categorial component and a lexicon generates deep structures (an infinite set of generalized phrase markers).

There is, however, another subcomponent of syntactic component i.e. the transformational component that converts the deep structure into surface structure.

Thus the rule of 'Agreement transformations are made to operate obligatorily on deep structures and surface structures of simple indicative sentences in Urdu/Hindi are generated. If, however, a case assignment rule is needed to apply, it operates postcyclically. After phenological interpretation, the surface structures, interms of spoken forms are determined.

A detailed account of simple sentence structures, in terms of NP and VP, will be made in chapter-one and two respectively.

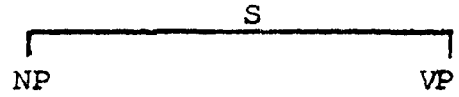
CHAPTER-I

THE NOUN PHRASE

A simple sentence in Urdu/Hindi, consists of two basic constitutets : a noun p phrase and a verb phrase. The following phrase structure rule that generates the deep structure of a simple declarative sentence may be formulated such as below :

(1) S ⟶ NP + VP

The deep structure of a sentence generated by the above rule would appear in the following tree form :



In Urdu/Hindi, the noun phrase has variously been used to function as subject, direct object, indirect object, post positional object, subject complement, object complement or preverb. Examples are given below :[1]

1. rām ne seb khāyā 'Ram ate apples'
2. latā ne lilā ko seb diye 'Lata gave apples to Leela'
3. rām̃ mohan se nahĩ mIlā 'Ram did not meet Mohan'
4. sitā bimār hai 'Seeta is ill'
5. maĩ rām ko dāktar samjhā 'I considered Ram to be Doctor'

In sentence 1, ram is subject and seb 'apples' are direct object (DO). In 2, lila is indirect object (IO) and seb 'apples' is DO. In 3, mohan is object of post position (PP) se. In 4,

bimar 'ill' is complement of the subject (subj) Sita and in 5, the complement daktar 'doctor' is predicated of the object(obj) ram.

Further more, a noun phrase immediately dominated by the sentence is the subject of that sentence and others that are dominated by the verb phrase of a deep structure do other functions.

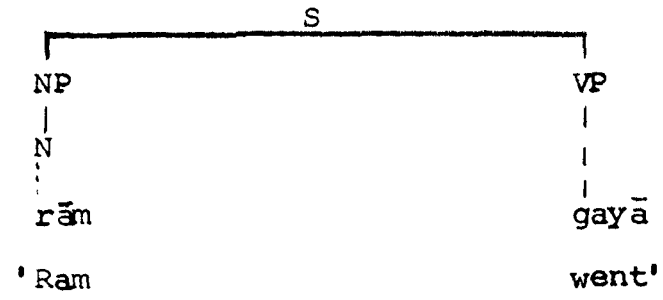
A noun phrase in Urdu/Hindi may be either simple or complex. The structure of the simple noun phrase is discussed first and the complex noun phrase will be accounted subsequently.

A simple noun phrase may consist of a noun or a noun preceded by one or more determiners.

With this statement we can propose the following tentative rule :

$$NP \longrightarrow (Det) + N$$

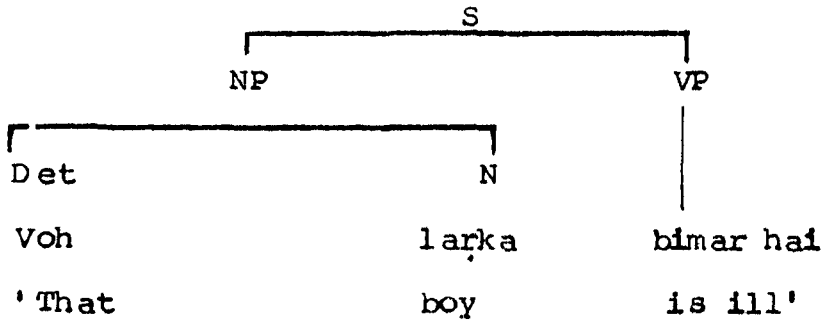
A noun phrase that contains atleast one constituent, a noun (N) has the following tree representation :



This possibility can be described in phrase structure rule :

$$NP \longrightarrow N$$

The noun phrase that contains a noun, preceded by an optional determiner, is shown in the following tree :



The phrase structure rule for this possibility is :

NP ⟶ Det + N

Both possibilities may be combined into one rule :

NP ⟶ (Det) + N

Parenthesis indicates that det is an optional item and does not appear in every noun phrase.

In Urdu/Hindi, noun phrases may contain not only Det but sentences as well. The noun phrase that contains an other S is termed as complex noun phrase. The sentences embedded in a NP, yield phrases or even full clauses. This may be illustrated in the following :

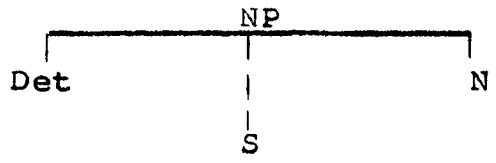
6. ram ne ek xubsurat jhil dekhi 'Ram saw a beautiful lake'.
7. ma ne rote hue bacce ko seb diye
   'Mother gave apples to the child who was weeping'.
8. jo larka aspatal mẽ tha voh kal mar gayā
   'The boy who was in the hospital died yesterday'.

In sentence 6, the NP contains an adjectival modifier, in 7, a participial, and in 8, a full relative clause.

Since noun phrases can optionally contain sentences, the PS rule given thus far must now be amended to show the possibility of a sentence occuring under NP, in apposition to a noun of the NP of main clause. The PS possibility for a complex NP is as follows :

$$NP \longrightarrow Det + S + N$$

The underlying representation of such phrases would look on follows :



Besides such NPs that contain modifiers, there are also cases where phrases or even full clauses function as noun phrases or complement of dominating NPs :

9. khelne acchi kasrat hai 'Playing is a good exercise'.
10. lata ka yeh dava ki ram sharab pita hai dUrUst nahi~
'Lata's claim that Ram drinks wine is incorrect'.

In 9, the subject NP contains only the phrase derived from a full clause and in 10, the clause ram sharab pita hai, is a complement of dava 'claim'.

Now the Ps possibilities for simple and complex noun phrases may now be combined in the following rule :[2]

$$NP \longrightarrow \left\{ \begin{array}{c} (Det) + N \\ Det + S + N \\ S + NP \end{array} \right\}$$

The first rule generates the structure of a simple noun phrase, second is employed in order to derive the structure which modify the noun and third generates the noun phrase which consists of a complement.

For the sake of brevity, first two rules of the three may be subsumed or collapsed into one rule which use braces to indicate alternatives :

$$NP \longrightarrow \left\{ \begin{array}{l} (Det) + (S) + N \\ S + NP \end{array} \right\}$$

NOUN (N) :

The nouns in Urdu/Hindi are subcategorized according to the inherent properties and these properties of nouns are represented as a set of features. The lexical entries or features of nouns would appear as follows :[3]

Nouns are either common [+common] , like kItāb 'book' kUttā 'dog' aurat 'woman' etc. or proper [-common], like āgrā 'Agra', rām 'Ram' etc. they may be concrete [+concrete] like mez 'table' makān 'house', makhan 'butter' etc. or abstract [-concrete], such as hImat 'courage', Insāf 'justice' kām 'work etc. they are count [+count], such as sher 'lion', bas 'bus', kām 'work' etc. or mass [-count], such as dudh 'milk', cini 'sugar' etc.

Few other features that are referred to as selectional features impose selectional restrictions (co-occurrence restriction) of noun with verbs. Nouns with these features are either animate [+animate] such as larka 'boy', kUttā 'dog' etc.

or inanimate [-animate] like mez 'table', kamrā 'room' etc. they can be human [+human] such as ādmi 'man', rām 'Ram' etc. or non-[-human] such as gadhā 'donkey' chipkIli 'lizard' etc.

The lexical entries for the following nouns would appear as follows :

l aṛkā 'boy'	+N +Common +Count +Concrete +Animate +Human	kItāb 'book'	+N +Common +Count +Concrete -Animate
kUttā 'dog'	+N +Common +Count +Concrete +Animate -Human	Insāf/bāt 'Justice/matter'	+N +Common +Count -Concrete
dudh 'milk'	+N +Common -Count +Concrete -Animate	rām 'Ram'	+N -Common +Count +Concrete +Human
aligaṛh 'Aligarh'	+N -Common +Count +Concrete -Animate		

Certain features are predictable from other features e.g. [+human] predicts [+animate], [+animate] predicts [+concrete], Thus, we need not to contain the features [+concrete] and [+animate], since both of these features are predicted by [+human.]. Also [-human] predicts [+animate] and [+concrete]. Furthermore, if the nouns are [-concrete], the feature [-animate] must be left out of the lexical entry.

By omitting all the rendundant information we can drop a number of predictable features. The final result would be as given below in the chart :[4]

	ādmi	rām	āgrā	kUttā	mez	Insāf/bāt	dudh
N	+	+	+	+	+	+	+
Common	+	-	-	+	+	+	+
Count					+	±	-
Concrete					+	-	+
Animate			-		-		
Human	+	+		-			

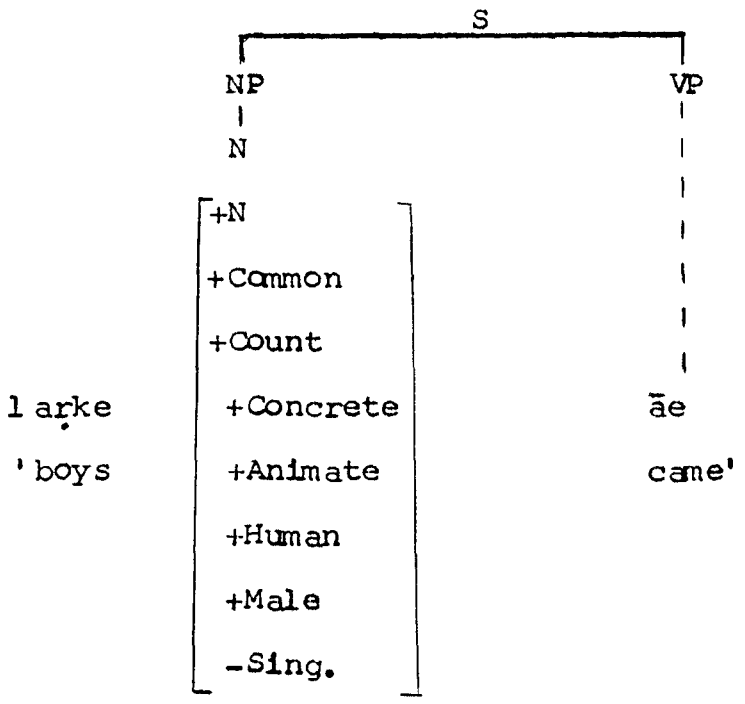
Some other features that are referred to as agreement features are gender and number features. These features, however, control the verbal agreement in Urdu/Hindi. An important effect is observable for gender [± male] and number [± singular] differences when "Agreement rules" are made to operate on the strings.

Nouns with gender features are either male, [+male] such as laṛkā 'boy', dudh 'milk', Irādā 'intention' or female [-male] such as laṛki 'girl', cini 'sugar', xushi 'happiness'; interms of number differences, they are either singular [+sing] such as kuttā 'dog', kItāb 'book', xushi 'happiness' or plural [-sing.] such as laṛke 'boys', meze 'tables', xushiyā̃ 'happiness' etc.

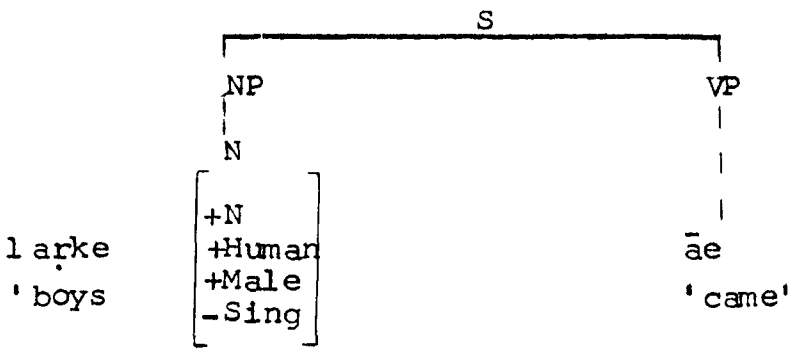
It is to be noted that the lexical items for number differences i.e. with respect to singularity and plurality are not

involved in the lexical. This information with respect to number differences is supplied in the deep structure that a noun is either singular or plural without having to represent this distinction with two separate lexical items in the lexicon.

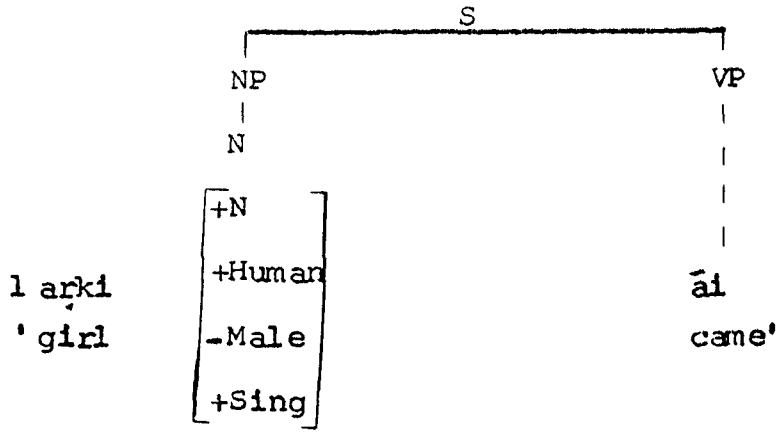
The lexical entry for noun larke 'boys' would roughly appear in the deep structure as follows :



By omitting the redundant information the lexical entry would look like :



If the lexical noun is larki 'girl' the lexical entry would be slightly different :



Only proper nouns do not allow determiner. Also [-concrete] nouns may have both [± count] features. All the nouns in Urdu/ Hindi are to be interpreted as being either male, such as ādmi 'man', sonā 'gold', Irādā 'intention or female such as aurat 'woman', cãdi 'silver', hImmat 'courage'. However, some animate nouns have only male form such as langur 'ape', citā 'tigar', totā 'parrot', maidak 'frog' or only female forms such as bher 'sheep', machli 'fish, maina 'a kind of bird'. Only [-count] nouns do not have plural [-sing] feature, however, some examples of plurality are possible :

11. In canõ ko bec do 'Sell these gram'
12. maĩ In gaihũõ ko nahĩ xaridũgā
'I will not purchase these wheet'.

PRONOUNS (Pro) :

Pronouns are to be interpreted as aspecial types of nouns having the features [+N] and [+pro] which appear directly under

immediate domination of N in the deep structures. All other nouns do not have the feature [+pro]. Since pronouns, just like nouns, impose, selection restrictions upon verbals they belong to a distinct set of nouns by the addition of other features.

Pronouns in Urdu/Hindi, may be subcategorized as definite, [+def] that are referred to as personal pronouns and indefinite [-def] such as koi 'someone' kuch 'something' sab 'all and kaun 'who'.

Definate pronouns fall into the following person and number categories :[5]

	Singular	Plural	Honorific
Ist per.	maĩ	ham	-
IInd per.	tu	tum	āp
IIIrd per.	voh	ve/voh	ve /voh

The proximate forms yeh 'this and ye 'these' and remote forms voh 'that'/'it' and voh/ve 'those' are also used as person pronouns which carry the features [±proxi] and [±animate]. Honorific āp is also used as reflexive pronoun which has a possession form apna 'self's'.

In addition to the features [+N] and [+pro], first person is marked with the features [+I], [±singular], second person takes the features such as [+II], [±sing] and third person carries [+III], [± sing] in the lexicon.

It is to be noted that gender features [±male] for pronouns are not involved in the lexicon. Since pronouns, ajust like nouns, also control verbal agreement, the information with respect to gender differences may also be supplied in the deep structures. Since all personal pronouns have been interpreted as [+def], this feature is omitted for the sake of brevity.

The lexical entries for the under noted pronouns are as follows :

mãi 'I' [+N, +Pro, +I, ±male, +Sing]

ham 'we' [+N, +Pro, +I, -Sing]

koi 'someone' [+N, +Pro, -Def, +Human]

tu 'thou' [+N, +Pro, +II, ±Male, +Sing]

tum 'you' [+N, +Pro, +II, ±Male, -Sing]

kuch 'something' [+N, +Pro, +Def, -Anim]

voh 'He/she' [+N, +Pro, +III, ±Male, +Sing]

voh/ve 'They' [+N, +Pro, +III, ±Male, -Sing]

sab 'All' [+N, +Pro, -Def, +Anim]

āp 'you/Hon' [+N, +Pro, +II, +Hon, ±Male]

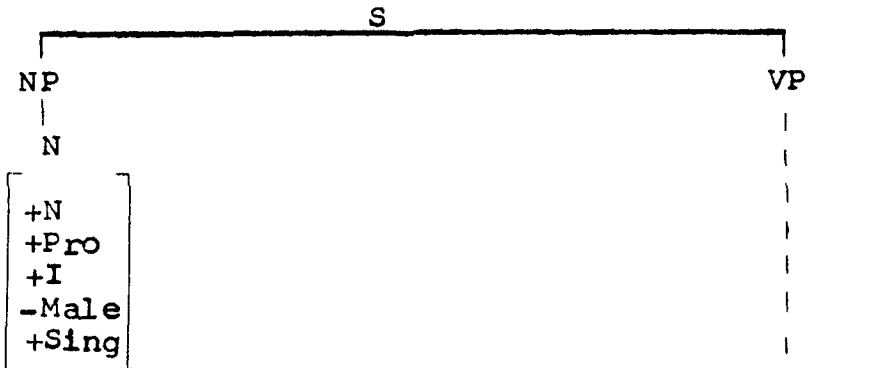
voh/ve 'He/she' (Hon) [+N, +Pro, +III, +Hon, ±Male]

yeh/ye 'It/this/these' [+N, +Pro, +III, +Prox, ±Anim, +Sing]

voh/ve 'That/Those' [+N, +Pro, -Prox, ±Anim, +Sing]

The deep structure of mai̯ 'I' in the sentence given below is as follows :

13. mai̯ gai thi 'I went'.



Only first person plural do not specify gender agreement. Also, pronouns do not occur with determiners. However, there are also cases where they may co-occur with noun like determiner.[6]

14. ham/āp logõ̯ ne apnā kām xatam karliyā
'We/you finished our/your work'.

15. tum bhaiyõ̯ ne abhi khānā nahi̯ khāyā
'You brothers did not yet eat food'.

In addition to, nouns occur in a variety of case forms in Urdu/Hindi : Unmarked (which do not take post position or marked with agentive post position ne, dative postposition ko, and instrumental postposition se.[7] Only object nouns are not followed by agentive ne. Case markers such as ko, se etc. which occur with object nouns originate in the deep structure and those that are used with subject nouns are introduced by 'case assignment rules or post-cyclic rule'.

Nouns in Urdu/Hindi according to gender number and case inflections have various forms :[8]

(A)	Unmarked case		Marked with PP	
	Sing.	Pl.	Sing.	Pl.
Mas. i.	laṛkā 'boy'	laṛke	laṛkā	laṛkõ
ii.	dost 'friend'	dost	dost	dostõ
Fem. i.	laṛki 'girl'	laṛkiyā̃	laṛki	laṛkiyõ
ii.	dhoban 'washer-woman'	dhobanẽ	dhoban	dhobanõ

There is another class of nouns which have two distinct plural forms inflected for various cases : Irregular and regular. Irregular plural forms which are not used in Hindi are mentioned below :

(B)	Sing.	Pl.	
Mas.	Shāīr (ne/ko etc)	shaurā (ne/ko)	'Poets'
	sher (ne/ko)	ashār (ne/ko)	'Lines of verse'
	bāɣ (ne/ko)	bāɣāt (ne/ko)	'Gardens'
	haq (ne/ko)	huquq (ne/ko)	'Rights'
Fem.	xātun (ne/ko)	xavātin (ne/ko)	'Ladies'
	majlIs (ne/ko)	majālIs (ne/ko)	'Committees'
	tasvir (ne/ko)	tasāvir (ne/ko)	'Pictures'

Regular plural forms which are similar to as mentioned in (A) are normally used in both, Urdu and Hindi.

Some examples are noted below :

Unmarked case		Marked case	
Sing.	Pl.	Sing.	Pl.
shāIr	shāIr	shāIr	shāIr 'Poets'
tasvir	tasvirẽ	tasvir	tasvirõ 'Picture

In terms of case, pronouns occur in a variety of forms than nouns, in Urdu/Hindi. This is illustrated in the following :[9]

Unmarked		Agentive	Dative	Possessive
maĩ	'I'	maĩ ne	mujh ko/mujhe	merā
ham	'We'	ham ne	ham ko/hamẽ	hamārā
tu	'Thou'	tu ne	tujh ko/tujhe	terā
tum	'You'	tum ne	tumko/tumhẽ	tumhārā
āp	'Hon(	āp ne	āp ko	āpkā
voh	'He/she/it'	us ne	us ko/use	uskā
ve	'They/its'	unhõne	unko/unhẽ	unkā
yeh	'This/it'	Is ne	Isko/Ise	Iskā
ye	'These/it'	Inhõne	Inko/Inhe	Inkā

Only dative āp ko has no alternate form. Dative mujhko, tujhko and agentive unhõne, Inhõne are irregular patterns in Urdu/Hindi. The possessive marker which is inflected for gender and number of possessed N, for third person and honorific āp is post position kā. Other pronouns allow only rā, e.g. merā ghar 'my house', teri kItāb 'thy book', uski larki 'his daughter' etc.

DETERMINER (DET) :

The determiners in Urdu/Hindi, are grouped in three major subclasses, both on sementic and formal grounds :

1. Common determiners (2) Post determiners (3) Predeterminers.

These various categories of the sort under discussion can be generated by the following determiner phrase structure rules :

1. Det ——→ (Pre-Det) + (Common Det) + (Post Det).

The rule indicates that above mentioned categories of determiners may be used singly or all together with a noun. In terms of common determiners, a three-way distinction is made : definite, indefinite and qualitative.

They are expressed by the following items :

Definite [+Def]	yeh 'this', voh 'that'
Indefinite [-Def]	ek 'a' koi 'any, kuch 'some'
Qualitative [+Qualit]	aisa 'such

Common determiners are generally referred to as basic determiners and their cooccurring restrictions are illustrated by the following rules :

(ii) Det ——→ $\left\{\begin{matrix}\text{Def}\\ \text{Indef}\end{matrix}\right\}$ + (Qualitative)

For definite reference, demonstratives are used which are either proximate or remote, and either singular or plural.[10]

	Proximate [+Proxi]	Remote [-Proxi]
Singular	Yeh	voh
Plural	ye	ve/voh

Examples are given such as the following :

yeh laṛkā	This boy
ye kItābe	These books
voh laṛkā	That boy
voh laṛkiyā̃	Those girls.

For singular and plural referance, indefinite determiners allow no formal marker attached to them.

koi and ek appear only before singular nouns, kuch co-occur with both, singular and plural nouns :
koi laṛkā 'Any one boy', kuch bātẽ 'Some talks'. Unmarked plural nouns are intepreted as indefinite : laṛke so gae.'The boys went to sleep'.

Qualitative agrees in gender and number with the noun that follows it :

aisā kām 'Such work', aisi bāt 'such talk', ase kapṛe 'such clothes'.

Some other examples of noun phrases with Det follow :

yeh aisā kām	'Such a work'
Kuch aisi bāt	'Some such talk'
ek aisi kItāb	'A book of this type'
koi aisi kItāb	'Any such book'.

16. ek faqir ke pās ek kUttā thā 'A begger had a dog'.
ek din faqir ne kUtte ko mārḍālā 'One day begger killed the dog'.

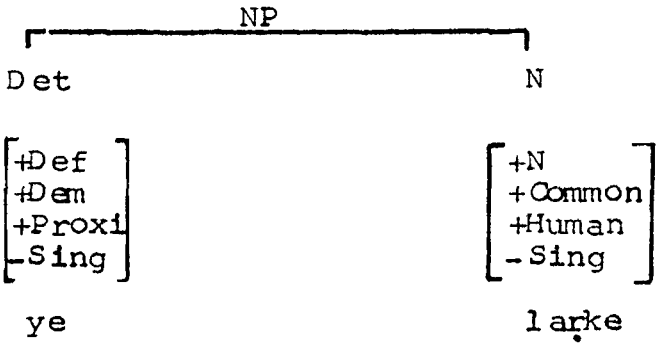
17. ghoṛe ke s̃ig nahi̇̃ hote 'A horse does not have outlers.

In sentence 16, the noun faqir and kUttā that are used without any determiner are definite noun phrases and the same nouns that are used with the determiner ek 'a' are indefinite. In 17, ghoṛā 'horse' is generic and is unmarked.

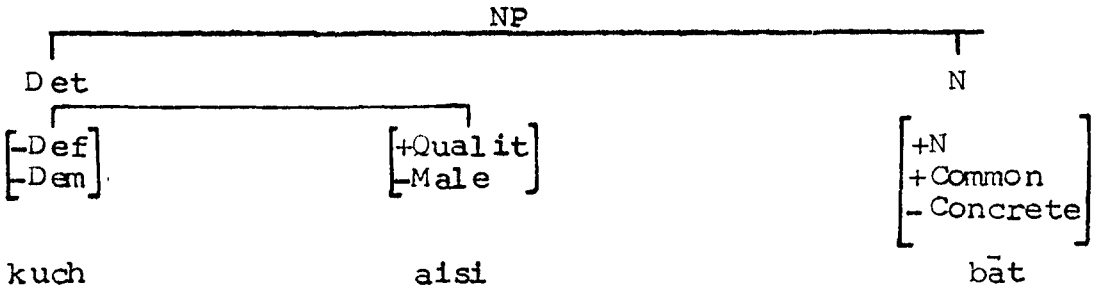
The determiners of the sort under discussion would contain the lexical features in the lexicon, such as the following :

yeh/is 'This'	[+Def, +Dem, +Proxi, +Sing]	ye/In 'These'	[+Def, +Dem, +Proxi, -Sing]
voh/Us 'That'	[+Def, +Dem, -Proxi, +Sing]	ve/Un 'Those'	[+Def, +Dem, -Proxi, -Sing]
koi 'Any/some'	[-Def, -Dem]	kuch 'Some'	[-Def, -Dem]
ek 'a'	[-Def, -Dem]	aisā 'Such	[+Qualitative, +Dem, +Male, +Sing]

The deep structure of the noun phrase such as ye laṛke 'these boys, is as follows :



The noun phrases such as kuch aisi bāt 'Some such talk' has the following deep structure



Post determiners can be optionally preceded by both, pre-Det and Det or any one of them.

Examples are illustrated below : -

Pre-Det+Post-Det+N
In mẽ se do kitābẽ 'Two of the books'

Det+Post Det+N

ye do nõ larke 'These two boys'

voh cārõ bhāi 'Those four brothers'.

Post-Det+N

pahlā sabaq 'First lesson'

Pre-Det+Det+Post+N

In mẽse yeh do ghore 'These two of the horses'

Traditionally in Urdu/Hindi, post-det are called quantifiers. Quantifiers consist of the various cooccuring categories, such can be illustrated by the following rules :[11]

(iii)

$$\text{Post-Det} \longrightarrow \left\{\begin{matrix}\text{Approximate}\\ \text{Ordinal}\end{matrix}\right\} + \text{Nonspecific} + \left\{\begin{matrix}\text{Cardinal}\\ \text{Multipl}\\ \text{Fraction}\end{matrix}\right\} + \left\{\begin{matrix}\text{Collective}\\ \text{Measure}\\ \text{Equi-particle}\end{matrix}\right\}$$

These categories of quantifiers are expressed by the following items. However, the numerals such as ordinals, cardinal, fractional and multiplicatives are referred to as definite, and non-specific as indefinite.

Approximates : qarib 'almost', taqriban /laghbhag 'Approximately'
Ordinals : pahlā 'first', dusrā 'second', dasvā̃ 'tenth' sauvā̃ 'hundredth'
Cardinals : ek 'one', do 'two, pā̃c 'five' etc.
Non-specific : kai 'several', cand 'few'
Multiplicatives : dugnā 'twice, tignā 'thrice'
Fractional : ādhā, 'half', tihāi 'one third'.
Collectives : darjan 'dozen', joṛā 'pair', gurs, ser 'seer', kilo, 'kilogram', liṭar 'leter', botal 'bottle' gaz 'yard'
Equi-particle : bhar 'equal to or full of'

The indefinite determiners do not usually cooccur with ordinals. However, the use of koi 'some' any' with ordinals is possible :

18. koi dusrā qalam lāiye 'Bring some other pen'

The indefinite NP is always marked with formal items such as koi 'some or ek 'a', the definite is unmarked, e.g.

Definite+Ordinal+N :

Koi do kItābẽ 'Any two books'.

Multiplicatives do not co-occur with collective or measure. In definite noun phrases, the cardinals are seen to be followed by an aggregative maker - õ/nõ which expresses the meaning similar to 'all' or 'whole' e.g. :

do + nõ = do nõ

'two + aggregative marker' = both

car + õ = carõ

'four + aggregative marker = All the four'

There are, however, cases where the earlier rule such as (iii) breaks down :

Cardinal + approximate + N /approxi + cardinal + N

do	āxri	parce	'Two last papers of Exam.
āxri	do	peṛ	'Last two trees'

Cardinal + Fractional + N

do tIhai makan 'Two third house'

Equi-particle bhar 'Equal to' is not used with measure, in case the measure is preceded by cardinal with idiomatic axceptions :

ek muṭhi bhar āṭā	'Floor, full of
ser bhar cini	'One kilo sugar'
do ser cini	'Two kilo sugar'
*do kilo bhar dudh	'Two kilo milk'

Non-specific+N :

thoṛā sā dudh	'A lot of milk'

Other instances of noun phrase with Det+Quantifiers are provided in the following :

koi do kilo dudh

aise dẹrh gurs tāle

aisā do gaz kapṛā

aisā kai gaz kapṛā

yeh āxri do dukāne̊

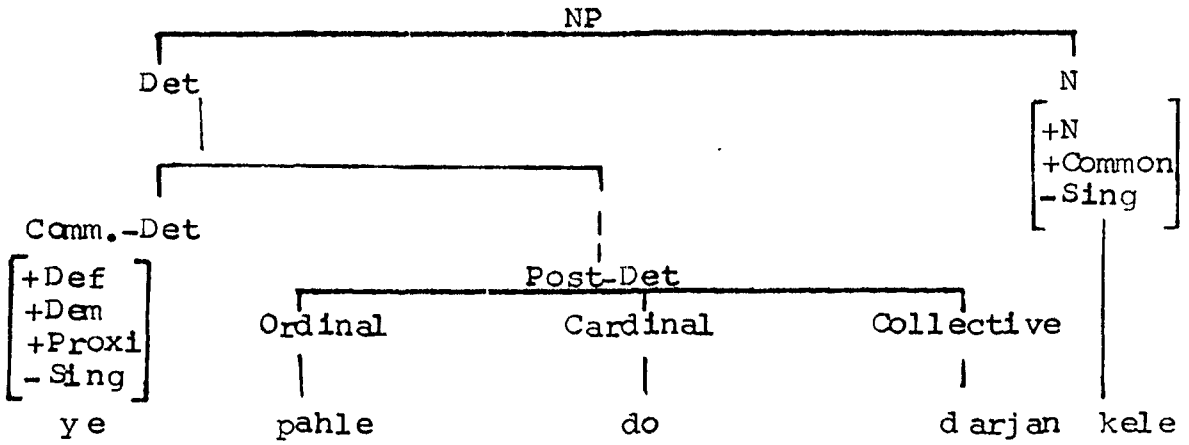
19. yeh itne kap cāe āp pi le̊ge 'Can you drink so many cups of tea'

Some quantifiers may cooccur in reduplicated forms. The instances are such as the following :

20. rām kai kai kilo dudh piletā hai 'Ram drinks several kgs.of milk

21. latā ne do do rupye sab bacco̊ ko diye 'Lata gave Rs. two to each child'

yeh pahle̊ do darjan kele 'These first two dozen bananas :



The items that occur before determiners are termed as pre-determiners. They may precede either common or post-determiners or both. They may occur before nouns with no common and post determiners.

The system of pre-determiner that incorporates various co-occuring categories is illustrated by the following rules :

(iv)

$$\text{Pre-Det} \longrightarrow \begin{bmatrix} \text{Def Det} \\ \text{Indef Det} \\ \text{Pronominal} \end{bmatrix} + (\text{Quantifier}) + \text{N} + \text{PP}$$

Def & indefinite Det have already been described earlier.

Pronominals having the feature [-sing] appear in this category of Det; Quantifiers such as non-specific, cardinals, collectives and measures are used in this system. Nouns with the feature [+concrete] are usually participate in this class and the post positions used in this structure are such as mẽ/mẽ se 'of the'

In the system of pre-determiners, the items that belong to the last category such as mẽ/mẽ se are obligatory and the rest are optional. This system makes itself to be independent by separating from the word mẽ or mẽse. The instances of pre-det are given such as the following :

<u>Pre-det+det+N</u>

un kItabo me se ek kitab 'One of the book'

<u>Pre-Det+Post-Det+N</u>

un kelo me se do kele mujh ko dijiye

<u>Pre-Det+Det+Post-Det+N</u>

In sab bhāiyõ mẽ yeh do nõ bhai

<u>Pre-Det+N</u>

In cārõ bhāiyõ mẽ se koi nahĩ āyā

ham donõ bhāiyõ mẽ se koi na koi ghar par mIlegā

Faqirõ mẽ se koi nahĩ āyā

ham mẽ se sIrf rām pās huā

ham mẽ se koi bhi vahā nahĩ jāegā.

The distinguishing characteristic of pre-Det is that they, unlike common and post determiners, can be used before either

proper noun or pronominals. Considerable examples, are such as the following :

hɑm bhāiyõ mẽ se sɪrf rām vahɑ̃ gayā thā

'Only Ram of our brothers went there'.

hɑm carõ bhāiyõ mẽ keval maĩ hi shādi shudā hũ

'Only I of our four brother, am married'.

The noun phrase may contain limiter expression such as sɪrf or sɪrf ..... hi 'only', bas ..... hi 'only', bhi 'also, Is ke alāvā ..... bhi 'also', yahɑ̃ tak kɪ ..... bhi 'even' etc. [12]

It should be noticed that these items are free floating and these could occur with any major lexical category in Urdu/Hindi. The instances are given such as the following :

rām bhi āyā hai

maĩ ne sɪrf do kele khāye

maĩ ne sɪrf do kele hi khāye

maĩ ne sɪrf do hi kele khāye

rām kal hi āyā hai

maĩ ne ām sɪrf cakhā hi thā

Other instances of limiters are as follows :

bas do hi kele de dijiye

yahɑ̃ tak kɪ voh do no kele bhi khāgayā

Is ke alāvā dudh bhi le lenā.

xāskar ālu to bahut nuqsandeh hotā hai

It is to be noted that all the pronominals and proper nouns do not cooccur with common and post determiners. They can be preceded by only pre-determiners.

NOTES AND REFERENCES :

1. Kachru Y. (1980:19). 'Aspects of Hindi Grammar.

2. PS rules proposed in this work follow the pattern of Jacobs and Rosenbaum (1968:50). 'English Transformational Grammar.

3. For the discussion of features of nouns, thisstudy follows the model of Jocabs and Rosenbaum (1968:60), proposed in 'English Transformational Grammar'.

4. Liles, B.L. (1971:39). 'An Introductory Transformational Grammar and Jocobs and Rosenbaum (1968:67).'English Transformational Grammar ' may be consulted.

5. Kachru, Y. (1980:26). 'Aspects of Hindi Grammar' and Subbarao (1971:180). 'A note on Reflexivization in Hindi' : Papers on Hindi Syntax, Vol-1, No. 2.

6. Jacobs and Rosenbaum (1968:94). 'English Transformational Grammar'.

7. Kachru (1980:25). 'Aspects of Hindi Grammar'.

8. _____ (1980:26). 'Aspects of Hindi Grammar'.

9. _____ (1980:27). 'Aspects of Hindi Grammar'.

10. _____ (1980:22). 'Aspects of Hindi Grammar'.

11. _____ (1980:23-24) 'Aspects of Hindi Grammar.

12. For details, Verma (1971). 'The structure of noun phrase in English and Hindi and Kachru (1980:24). 'Aspects of Hindi Grammar,' are referred.

CHAPTER-II

THE VERB PHRASE

The verb phrase consists of an obligatory main verb plus an auxiliary preceded by an optional complement and adverbial.

This can be described in a phrase structure rule :

i. VP ⟶ (Adv) + (Comp) + MV + Aux

Here under, first the MV will be discussed and then auxiliary, subsequently, the complement and adverbial will be described. There are three sets of verbs in Urdu/Hindi in terms of semantic properties [1]. These are the distinctions between active (+Action) vs. in-active (-Action), stative [+Stat]vs. non-stative [-Stative] and voluntary [+voluntary] vs. in-voluntary [-voluntary] [2]

Most active verbs are voluntary and most inactive are in-voluntary. Stative and non-stative verbs are involuntary and denote states of the subject and change of state or accidental event respectively. In general, most voluntary verbs denote deliberate action and most involuntary denote states or createa change in the state of experiencer or accidental event.

Although involuntary verbs normally indicate inactivity, it may express on going or change in action or accidential action (e.g. gIrna, bIhna, khona). The examples are such as below :

1. rām bimār hai — 'Ram is ill'
2. rām bimār hogayā — 'Ram fell ill'
3. baccā khel rahā hai — 'The child is playing'
4. baccā gIr paṛā — 'The child fell down

5. bacce ko bhuk hai/ɤussā hai 'The child is hungry/angry'

6. bacce ko bhuk lagi/ɤussā āyā 'The child felt hungry/became angry'

7. latā ko yeh kItāb pasand hai 'Lata likes this book'

8. latā ko yeh kItāb pasand āi 'Lata liked this book'

9. latā ne yeh kItāb pasand ki 'Lata liked this book'

10. latā ne yeh kItāb pasand karli 'Lata liked this book'

In the above three sets of sentences, 1,5 and 7 indicate states of the subject, 2,6 and 8 indicate change of state, and 3,4 and 9,10 express action.

It is noted that the only clearly stative verb is ho 'be' which requires a nominal, adjective, or adverbial as predicate complement. Stative verb ho 'be' has been referred to as coupla in most Hindi works :

11. rām dhani hai 'Ram is rich'

12. voh ḍāktar hai 'He is a doctor'

13. rām ghar mẽ hi hai 'Ram is at home'

14. latā ab acchi tarah hai 'Lata is well now'

The stative ho 'be' in Urdu/Hindi, has only the following forms : hai 'is', thā 'was' ho 'be' hota 'be + imp', and hogā 'be + fut'. (inflected for gender number and/or person number) (See Kachru : 1980:45).

Non-stative verb ho (ja) 'become' (which has been termed as inghoative by Kachru) has all the regular tense aspect forms. Other non-stative verbs are for example, ban 'become', rah 'remain', nIkal 'proved', par 'fall' ṭhIhIr 'stay' (with an adj or nominal) and active verbs are such as jā 'go' hãs 'laugh', khā 'eat' kar 'do' etc. Examples are provided below :

15. rām ab sharif hogayā hai	'Ram become gentle now'
16. voh bevaqur nIklā	'He proved (to be) stupid'
17. Zed ḍāktar ban gayā	'Zaid became a doctor'.
18. voh gadhā hi rahā	'He remained idiot'
19. mohan acānak bimār par gayā	'He fell ill suddenly'
20. bacce bāzār gae hai	'The children have gone to market
21. usne bhojan kar liyā	'He ate food'.

Sentence 15-19 indicate change of state and 20-21 express action.

Stative verb and objectives are not used in imperative and continuous aspect :

22. *Xush ho	'Be happy'
23. *latā xush ho rahi hai	'Lata is being happy'

Nonstative and active are used in imperative and continuous aspect :

22. Xush ho jao	'Be happy'
25. khelo	'Play'
26. latā xush horahi hai	'Lata is becoming happy
27. simā khel rahi hai	'Seema is playing'

There is a sub-class of stative and non-stative verbs that requires subjects to be marked with the dative post-position ko and takes only the abstract nominal complement. The verbs (with nominal) such as bhuk hona 'be hungry' ɣussa hona 'be angry' are stative and bhuk lagna 'feel hungry', ɣussa hona 'became angry' are nonstative and some verbs that take concrete complement, such as lagnā 'hit' jãcnā 'appeal to' are the other dative subject non-stative verbs of Urdu/Hindi.[4]

Sentences such as the following contain such verbs :

28. mujhe afsos hai kI voh nahĩ āyā 'I am sorry that he did not come

29. latā ko bahut bhuk hai 'Lata is very hungry'

30. rām ko ɣussa āyā 'Ram become angry'

31. bacce ko bhuk lagi 'The child felt hungry'

32. sher ko goli lagi 'The bullet hit the lion

33. sitā ko yeh kItāb nahĩ jãci 'This book did not appeal to Sita'.

Sentences 28-29 are stative and 30-33 are nonstative. The nominals such as afsos, bhuk, ɣussā, goli and kItāb function as predicate complements.

There is, however, an other sub-class of these inactive (stative and nonstative) verbs that requires ko marking on subject and allows abstract N as preverb which does not function syntactically in the sentence. Such combinations of preverb + V together constitute a semantic unit. Verbs employed in this way are infact referred to as conjunct (complex) verbs. Conjunct verbs formed with PV + V are preceded by another noun that functions as complement. Pre-verbs are distinguished by the fact, however, that they do not determine verbal agreement, on the other hand, complements do seen to be employed in this way. The examples are presented below :

34. ram ko sab bate malum hai 'Ram knows every thing

35. mujhe āpki tajviz manzur hai 'I accept your proposal'

36. latā ko yeh kItāb pasand hai 'Lata likes this book'

37. latā ko sab bātẽ malum hogaĩ 'Lata came to know every thing'

38. lālu ko yeh kItāb pasand āi 'Lalu liked this book'

Sentences 34-36 are stative and sentences 37-38 are non-stative. In 34-36, the verbs are hona 'be' and nouns mālum, manzur, pasand are pre-verb. Similarly, the noun phrases such as sab bātẽ, āpki tajviz and yeh kItāb function as complements. In 37-38, mālum honā, pasand ānā are conjunct verbs (PV + V) and sab bātẽ, yeh kItāb are used as complement of conjunct verb (PV + V). Most stative verbs fall into the following three sets :[5]

Simple stative (Unmarked subj)	Dative subject stative	Complex stative
bimār honā	bhuk honā 'be hungry'	pasand honā
'Be unwell'	pyās honā 'be thursty'	'like'
xush honā	ɣussa honā 'be angry'	svikār honā
'Be happy'	xushi honā 'be happy'	'accept'
māldār honā	buxār honā 'get fever'	mālum honā
'be rich'		'know'
ḍāktar honā		yād honā
'be doctor'		'remember'
ghar mẽ honā		dāxIl honā
'be at home'		'admit/enter'

Also, nonstative verbs have such three sets :

Simple nonstative (Unmarked subj.)	Dative subj.non-stative	Complex nonstative
xush honā	bhuk lagnā	pasan ānā 'like'
'become happy'	'be hangry'	yād honā/ānā
behosh honā	ɣussā ānā	'remember'
'become senseless	'be angry'	swikār honā 'accept'
ḍāktar bannā	buxār honā	manzur honā 'accept'
'become doctor'	'get fever'	mālum honā 'come to know'
bimār paṛnā	kItāb jẽchnā	dIkhāi denā 'to be seen'
'become unwell'	goli lagnā	sunāi denā 'to be listen'
hoshyār nIkalnā	pyās lagnā	dIkhāi paṛnā 'visible fall'
'proved intelligent'	'become thursty'	nazar ānā 'visible come' dāxIl honā 'admit/enter'

Differentiation of these verbs is accomplished by the addition of other features.

Lexical entries for the following verbs are as :

(a)

honā 'be, become' [-Action, ±Stative, +Pred, ±Dat:subj]

(b)

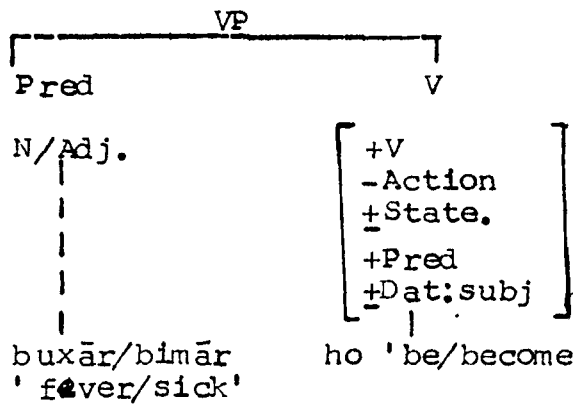
pasand ānā/ honā 'like' [-Action, ±Stative, +PV, +Pred, +Dat:subj]

The features of simple and complex inaction verbs have been summarized in (a) and (b) respectively.

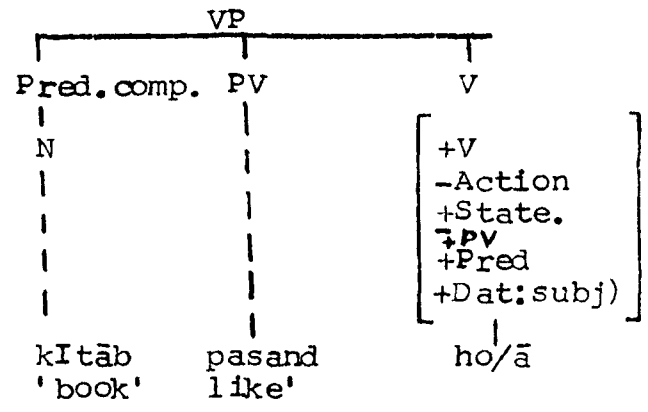
To sum up the discussion on inactive verbs so far : in Urdu/ Hindi, simple verbs are marked with the features as [+pred,] and [± Dat.] and complex, however, are marked with the features [+PV], [+pred] and [+Dat.]

In the deep structure the simple and complex verbs would look some thing like the following :

Simple verb :



Complex verb:



Active verbs have been subcategorized as intransitive, transitive, double transitive, interms of the number and kinds of objects they take. The examples are as follows :

39. rām daurā 'Ram ran'

40. latā ne cae pi 'Lata drink tea'

41. mohan ne sohan ko patra bhejā 'Mohan sent a letter to Sohan'

In sentence 39, the verb is intransitive that allows no object; in 40, the verb pi is transitive that, takes only one object and in 41, bhejā is double transitive verb that takes double object i.e. direct and indirect.

Most intransitive verbs such as gIrna 'fall' phaṭnā 'burst'/ tear', ṭuṭnā 'break', bIhnā 'flow' khonā 'lose' sukhnā 'dry etc. are nonstative and denote involuntary actions. Other intransitive verbs such as motion verbs (ānā 'come' jānā 'go' doṛnā 'run') and verbs of expression (hãsnā 'laugh', ronā 'cry' chIllānā 'shout') are action verbs and they denote voluntary acts.

Most transitive verbs (e.g. khānā 'eat', pinā 'drink', sikhnā 'learn', dekhnā 'see', karnā 'do' and most double transitive verbs (e.g. denā 'give', bhejnā 'send, lIkhnā 'write' parosnā 'serve') are action verbs and they denote voluntary acts.

Transitive verbs such as bhulnā 'forget' khonā 'lose', jānnā 'know' are involuntary. The verb such as jānnā 'know' is stative and can not participate in imparitive and continuous aspect. However, the verbs such as samajhnā 'understand', mānnā 'accept', pahcānnā 'know' rakhnā 'have', though transitive, are neutral with respect to stativeness and volition. Compare the following sentences : [5]

42. maĩ āp ki harkatẽ samajhtā hũ 'I comprehend your activities'

43. bacca ne hīsab samaj liya 'The children understood the Math problems.'

Most intransitive verbs with the feature (+Action) are marked [-NP], since they do not permit object NP. Transitive verbs that take only one object have the features [+NP], [± animate : obj] and [± animat : subj.]. other verbs that take double objects i.e. direct and indirect object both, contain the features [+ double NP], [± animat : Do] [+ animate : IO], [+ Human : subj .]

Some other features that are relevant to the subject of the verb are observable. Most transitive and some intransitive verb (e.g. nahana 'bath' chĩknā 'sneeze', khãsnā 'cough') require their subjects to be marked with agentive post position ne- in the perfective aspect. The ne - marking of the subject of the transitive verb such as mIlnā 'meet' bolnā 'speak', lānā 'bring' is not permissible.

The lexical entries for the under noted simple verbs would look like the following :

daurnā 'Run' [+V, +Action, -NP, +Anim: subj, -ne]

parhnā 'Read' [+V, +Action, +NP, -Animat: obj, +Human: subj, +ne]

denā 'Give' [+V, +Action, +Double NP, +Animat: Do, +Animat: IO, +Human: subj, +ne]

There is, however, another small sub-class of active verbs that forms a conjunct verb to be the active counter part of the inactive complex verbs in Urdu/Hindi. This class (e.g. karnā 'do'). of verbs requires an unmarked noun as preverb which has no syntactic function in the sentence and then the combination (PV+karnā) of

the sort under discussion preceded by another noun as complement which controls verbal agreement is referred to as nonfunctional conjunct. If, however, a preverb precided by a genitive object or post positional complement (N+par, mẽ or se) has syntactic function like a direct object, these will be referred to as functional conjunct. In the following sentences, the used verbs, however, are conjunct verbs.

44. bacce ne kavItā yād ki/sabaq yād kiyā 'The child learnt poem/lesson.

45. usne laṛki kā byāh kardiyā 'The girl was married (within some one) by him'.

46. usne laṛki se bāt ki 'He talked to the girl'.

Sentence 44, contains nonfunctional preverb and 45-46, contain functional preverb.

Abstract nouns such as talāsh 'search', māf 'excuse', pesh 'offer', pasand 'like', manzur 'accept', yād 'remember', taqsim 'divide', dāxil 'admit' etc. If, however, cooccur with verb karna 'do' then the combination of N+V constitutes a conjunct.

There are also cases where complement of preverb is preceded by an optional NP (as indirect object) marked with dative ko. In case the complement occurs with genitive ka, the preceding NP is marked with instumental post position se.

Examples are illustrated below :

47. maĩ ne latā ko ek tuhfā pesh kiyā 'I presented a gift to Lata'.

48. rājā ne sIpahiyõ ko Ināmāt taqsim kiye

'Raja distributed prizes to the soldiers'.

49. shilā ne lilā se ritā ki tārif ki 'Sheela praised Rita to Lila'.

The lexical entries for the following conjunct verbs are as follows :

pasand karnā 'Like'

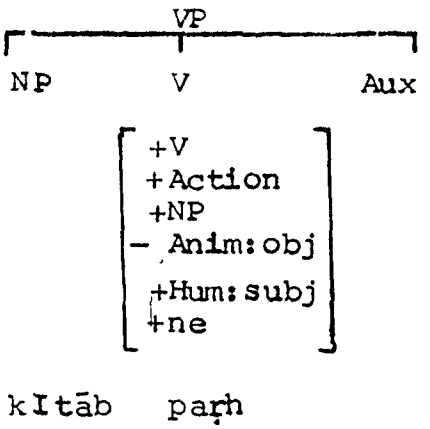
+V
+Action
+ PV
+Pred
-NP
±Hum: subj
+ne

pesh karnā 'Present'

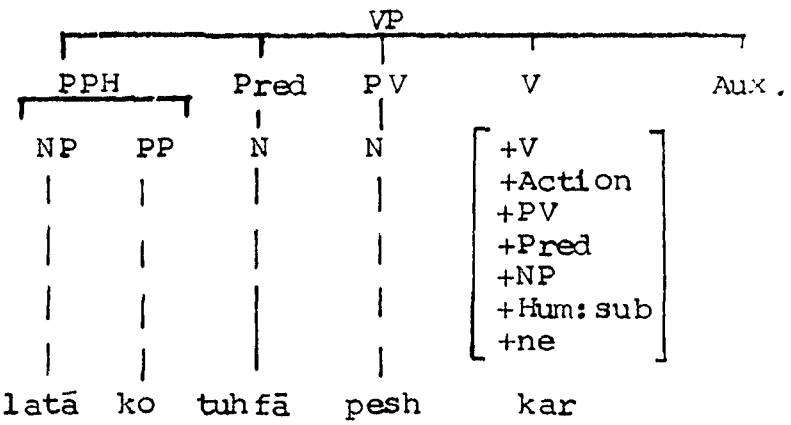
+V
+Action
+PV
+Pred
+NP
±Hum: subj
+ne

The simple and conjunct (active) verbs are represented in the deep structure such as below :

Simple verb :



Complex verb



It is noted that the items such as kItāb paṛh and latā ko tuhfā pesh kar are inserted under nodes by lexical insertion transonmation, if however, no transformation is needed to apply.

It can be argued that the status of functional preverb is in doubt, since the object of the simple verb such as puchnā 'ask' sunnā 'here' as well as preverb preceded by a p phrase have the same syntactic function in the sentence. The examples given below are to be compared.

50. usne latā se kuch bātẽ kĩ 'He asked some things to Lata'

51. usne latā se kuch bātẽ puchĩ

52. usne latā ki bāt suni

53. usne latā ki madad ki.

A reasonable assumption with respect to conjunct verb is outlined such as follows : any noun attached with a verb if, however, takes no post position and has no syntactic function in the sentence is referred to as preverb and the combination of the type (N+V) is said to be a conjunct. An other noun that precedes the preverb controls verbal agreement, in case it is in unmarked position.[8]

It is to be noted that the inactive verbs such as honā 'become' ānā that allow ko with their subject also require their subject to be marked with instrumental se. The example are noted below :

54. rām se yeh kām nahĩ hotā

55. āp se yeh zubān nahĩ āti

56. rām se urdu nahĩ āti

57. bacce se yeh sabaq yād nahĩ hotā

The evidence to supports the claim is provided by the reflexivization rule in Urdu/Hindi. Thus, given sentences such as below undergo the reflexive rule obligatorily.

58. āpse apni zubān nahĩ āti

59. āpse apnā kām nahĩ hotā

60. bacce se apnā sabaq yād nahĩ hotā

Sentences mentioned above make it clear that at the point where the reflexive rule applies āp and baccā in sentences 58-60 must be NP of S.

It is clear that just as dative subject, instrumental subject control the reflexive pronoun. 61 is compared with 58-60:

61. rām ko apni mãki yād āi.

They control the deletion of the subject of v-kar phrase as well as verbal noun.

62. khānā khā kar mjuh se kām nahĩ hotā

63. mujh se hindi bolnā nahĩ āti

On thebasis of form as well as syntax, verbs in Urdu/Hindi have been categorized as simple (one word verb) complex (conjunct) and compound. Simple and conjunct verbs have been described in the earlier discussion held so far; compound verbs are such verbs that are noted in the following examples :

64. bacca bĩlbĩla uṭha 'The child shouted'.

65. kUttā mar gayā 'The dog died'.

66. rumā gĩr paṛi 'Ruma fell down'

67. simā ne sab dudh piliyā 'Seema drank all milk

68. usne ghoṛā bec diyā 'He sold the horse'

In 64-68, bĩlbĩlā, mar, gĩr, pi and bec are main verbs. The second elements in the combination of V+V have variously been referred to as subsidiary verbs, helping verbs, anxiliary, vector, explicator, operator etc. in most Hindi/Urdu works. The explicator verbs add specific meanings to the meaning of themain verb but the basic meaning of the sentence is determined by the main verb (Kachru 1980:57)[9]. The term operator will be used have consistantly for the reference of second verbal element.

The main operator verbs in Urdu/Hindi are ānā 'come', jānā 'go', lenā 'take' denā 'give', uṭhnā 'rise', baiṭhnā 'sit', paṛnā 'fall', ḍālnā 'add', pour, rakhnā 'keep' 'put', choṛnā 'leave'

mārnā 'hit', nīkalnā 'emerge', dhamknā 'thump' and karnā 'do', pahucnā 'reach'.[10] However, all the operator verbs do not participate with all main verbs.

Other combinations such as līkh mārnā, cal nīkalnā 'carryon', kho baiṭhnā calbasnā 'to pass away', ban ānā 'to be in danger' ch baiṭhnā/daurna 'to rush on' etc. convey idiomatic expression.

A few of the operators are exemplified below :

69. āpne yeh kyā likh mārā 'What did you write out it'

70. pītaji kal cal base 'Yesterday (my) father passed away'

71. baccā kīlās mẽ cal nīklā hai 'The child has carried on in the class'.

72. voh apni aql kho baiṭhā 'He lost his mind'.

The rule that generates the structure of compound verbs would look on follows :

(ii) MV ⟶ V+(Operator)

The main verb consists of a verb followed by an operator. In addition to a single operator, a MV may be followed by more operators. This may be illustrated by the following rule.

Operator ⟶ V+(V)+(V)

This is to be exemplified such as below :

MV + Opr.

73. lata so gai 'Lata went to sleep'

MV+Opr+Opr

74. subah ko jaldi uṭh jāyā kijie 'Wake up early in the morning'.

75. shām ko jaldi khānā khā liyā karta hũ

'I take dinner early in the evening.

MV+Opr+Opr+Opr.

76. agar baccõ ko dīhli lejānā paṛ jae to kahā ṭhīhrũ

'Where should I make stay if I have to carry my children to Delhi'.

77. kabhi kabhi ek kebadle mẽ do do dedena paṛ jate haĩ

'Sometimes we have to give double in place of one'.

There are also cases where imperfect, perfect or infinitive participles are used with MV or operator and they show agreement with subject or some other noun in gender and number. The participles and agreement markers are introduced by transformational rules.

78. baccā shām tak kheltā rahā 'The child kept playing by evening'.

79. āmõ se peṛ lade paṛe haĩ 'The trees are ladening with mangoes'.

80. bāz auqāt dushmanõ se bhi bāt karni paṛ jā ti hai

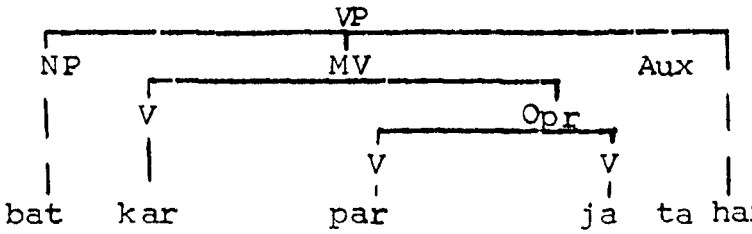
'Sometimes we have to talk to enemies'.

In sentence 78, imperfect verb kheltā agrees with masculine plural subject. In 79, perfect form of the verb lade shows agreement with mas. Plural subj. and in 80, inflected infinitive form karni agrees with the fem. sing. object bāt.

The MV with the operator karnā as well as jānā, lenā, denā and ḍālnā or even these operators are in inflected perfect participle form, show neutral agreement.

81. voh apnā kām abhi kiye letā hai 'He will finish his work just now'.

The underlying structure of a VP with two operators is as follows :



By Part. T-Rule : karna par ja ta hai

By Agreement Rules : karni par ja ti hai

It is to be noted that now in standard Urdu inflected finitive form of the verb remains in neutral agreement.

THE AUXILIARY :

The auxiliary consists of a modal, aspect and tense. The tense is the obligatory constituent and modal and aspect are optional.

The above information can be had in the following rules :

iii. Aux ⟶ (Modal) + (Aspect) + Tense

In addition to, the verb as well as auxiliaries take mood marker and show agreement in number, gender and person with the subject or some other noun in the sentence. The mood as well as agreement markers are not represented in the deep structure but rather introduced to the left of proper constituent by transformation and this need not be considered here.

The following verbs that are used as modal in Urdu/Hindi are for example, saknā, cuknā, pānā, paṛnā, honā and denā, cahiye and lagnā may also be added to the above list. saknā, cuknā are modals other verbs are pro-modals which can be used even as MV or an operator. The modal verbs add specific meaning to the meaning of the verb in order to indicate the particular state of affairs. The modals saknā and pānā indicate capability (possibility or ability), cuknā indicates completion, paṛnā and honā indicate compulsion (external and internal), dena indicate permission, lagnā indicates inception and cahie indicates desire. All the modal verbs except saknā, cuknā and pānā occur with the inflected infinitive form of the main verb. However, the use of pānā with infinitive form is optional.[11]

81(a) maĩ kal hi jā sakũgā — 'I will be able to go even tomorrow'.

82. voh aj bIlkul nahĩ paṛh pāyā — 'He would not read today at all'.

83. maĩ yeh tasvir dekh cukā hũ — 'I have seen this picture'

84. mujhe sab kām xudhi karnā paṛā hai

'I have to do all the work myself'.

85. latā ko har māh dIlli jānā hotā hai

'Lata goes to Delhi every month'.

86. āp abhi se sone lage — 'You are feeling sleeping since now'.

87. tumhẽ abhi jānā cāhiye — 'You must go just now'.

88. bacce mujhe zarā bhi paṛhne nahĩ dete

'The children did not allow me to study at all'.

Pro-modal verbs can also be used as main verb or operator :

89. usne Inām pāyā — 'He got prize'

90. maĩ ne use ek kItāb di — 'I gave him a book'

91. rām ko buxār ho gayā — 'Ram got fever'

92. baccā bimar paṛā hai — 'The child is not well'

93. mujhe do kItābẽ cāhie — 'I went two books'

94. baccā gIr paṛā — 'The child fell down'

95. maĩne uskā kām kar diyā — 'do his work'

96. kashti kinare par ja lagi — 'The boat reached the bank (of river)'.

In 89-93 the verbs are used as MV and in 94-96, second verbal elements are operators.

In Urdu/Hindi, a three way distinction is made to serve the purpose of aspect : imperfect, perfect and continuous. These are expressed by the following forms (i.e. third person singular masculine which refer to as unmarked forms in deep structure):

Imperfect	-ta
Perfect	-ya (verb ends on vowel otherwise zero with exceptions)
Continuous	-rah

In terms of the above statement the aspect is expanded to provide three basic choices by the following rewrite rules :

$$\text{Aspect} \longrightarrow \left[+ \left[\begin{matrix} \text{Imp} \\ \text{Perf} \\ \text{Cont.} \end{matrix} \right] - \right]$$

The secondary system of frequentative repetitive and inception aspects (proposed by Kachru)[12] is here ruled out. The verbs karna, rahna used with imperfect or perfect stem of MV (e.g. āyā kartā hai, paṛhtā rahā) are considered here and elsewhere as operator verbs and verb lagnā with the infinitive stem of MV (e.g. jāne lagā) as modal verb.

All these aspectual forms are examplified below :

97. kUtte rāt ko bhõkte haĩ 'Dogs bark at night'

98. abhi rām nahĩ āyā 'Ram did not come by this time.

99. cĩryā̃ gārahi haĩ 'Birds are singing'.

In 97-99 the elements - t- (in bhõkte). -y- (in āyā) and rah (in gā rahi) indicate imperfect, perfect and continuous aspect respectively; -e, -a and -i indicate pl. masculine, sing. mas. and feminine (pl.) concord.

A three way distinction is set up in terms of tense : present, past and future. The present and past tense auxilaries are expressed by hai and thā (and their inflected forms). The future is expressed by the bound from -gā (inflected for number and gender).

The affix - gā is attached to the stem of the verb inflected for person and number (e.g. piegā 'He will drink). It does not co-occur with aspectual forms. This is illustrated from the following examples :

100. baccā so rahā hai 'The child is sleeping.'

101. voh banāras mẽ paṛhā thā 'He studied in Banaras.'

102. maĩ aj dehli jaũ gā 'I will go to Delhi today.'

In sentences 100-102, the elements hai, thā and gā are present, past and future tense markers respectively. The rule which expends tense indicating alternatives is as follows :

$$\text{Tense} \longrightarrow \left[+ \begin{bmatrix} \text{Present} \\ \text{Past} \\ \text{Future} \end{bmatrix} - \right]$$

In Urdu/Hindi, the following six classes have been set up in terms of mood. These are expressed by unmarked forms (except for imperative).[13]

Imperative	so	'Sleep'
Optative	soe	'May sleep'
Indicative	sota hai	'Sleeps
Presumptive	soya hoga	'May have slept
Contingent	soya ho	'Were he to have slept'
Subjunctive	sota/soya hota	'Had (he) been sleeping/had (he) slept'

It seems to be indicative that all the mood markers (except indicative) are introduced into the structure of a VP by transformational rules.

In terms of agreement markers two distinct sets have been set up : gender number and person number. These are expressed by the following forms to determine the concord in the charts below :

	Mas	Fem
A. Singular	-a	i
Plural	-e	i/ĩ

	Ist per	IInd per	3rd per.
B. Singular	ũ	e	e
Plural	ẽ	o	ẽ
Hon.		ẽ	ẽ

It seems reasonable to mention that one particular form can be used to specify more than one grammatical meanings. Agreement markers, however, are marked with verbs as well as anxilaries by agreement transformation'.

Causative verbs will be taken into account in an other part of this work. The passive verbs are derived from active verbs, through the process of passivization. The passive is formed by attaching jā auxiliary to the perfect stem of the verb which can be followed by other regular auxiliaries. The agent of the active sentence is marked with the instrumental postposition se 'by' in the corresponding passive. Further more, the optional agent movement as well as deletion rules are made to operate. The agentless passive is possible, in case a transitive verb is involved.

103. āpkā kām kar diya gayā 'Your work was done'

Agentless constructions are not possible in case an intransitive verb is involved, except for the following :[14]

104. ab calā jāe 'Let us go'

105. ab soyā jāe 'Let us sleep some more'

The deep structure of the following sentences is given below :

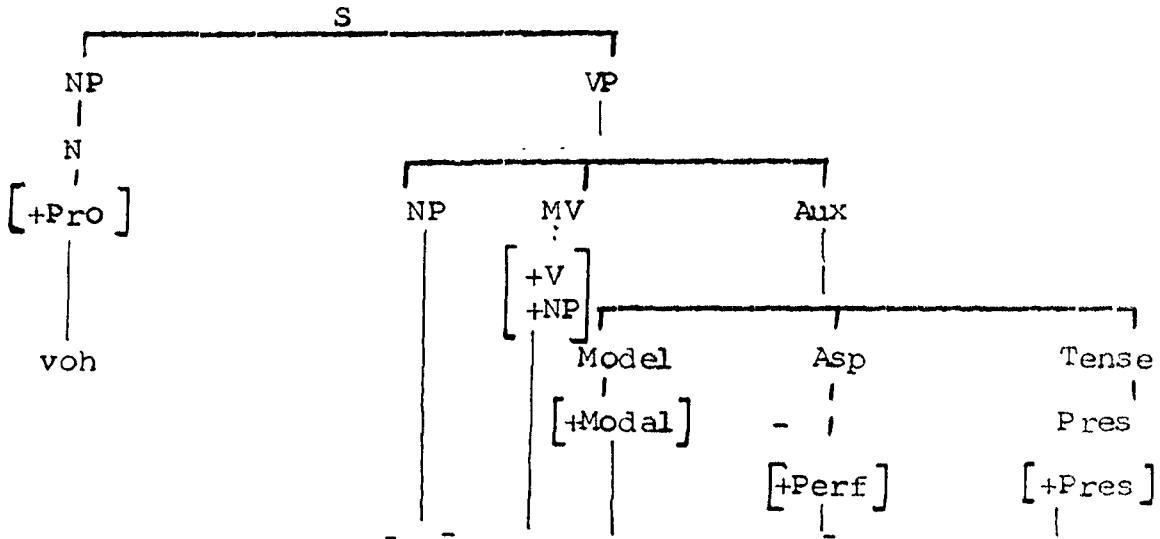
106. voh apnā kām kar cuki hai 'She had finished her work'

107. maĩ kal hi ā sakū̃ gā 'I will be able to come even tomorrow'.

108. simā ṭainIs khel rahi thi 'Seema was playing tennis.

109. laṛkiyā̃ gIt gāti haĩ 'The girls sing the songs'

Sentence-106

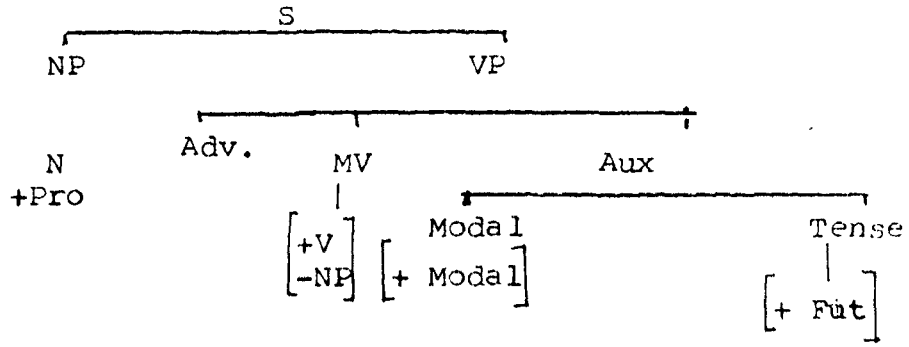


By lexical insertion rule: apnā kām kar cuk

By Agreement rule: apnā kām kar cuk yi hai

By phonological rule : apnā kām kar cuki hai

Sentence-107:

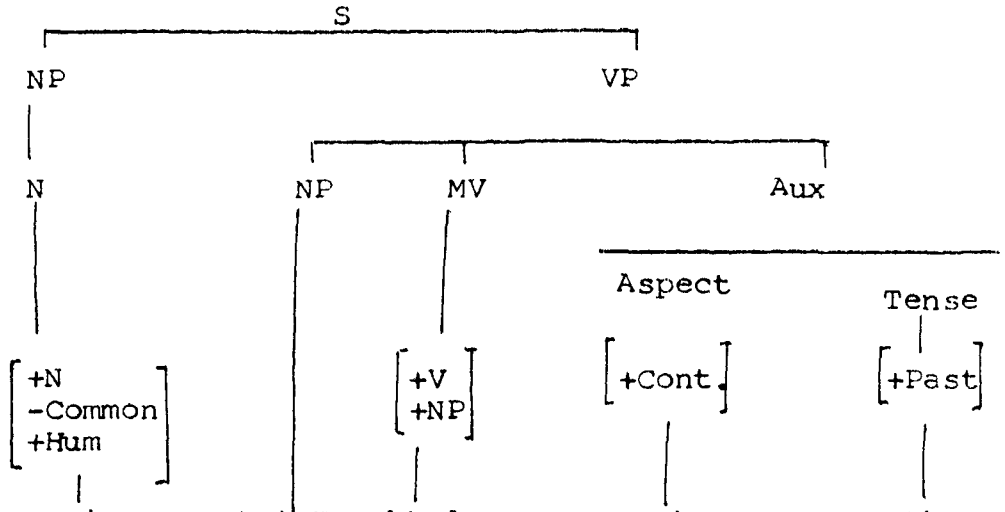


By lexical: mai kal hi a sak ga

By Agreement: mai kal hi a saku ga

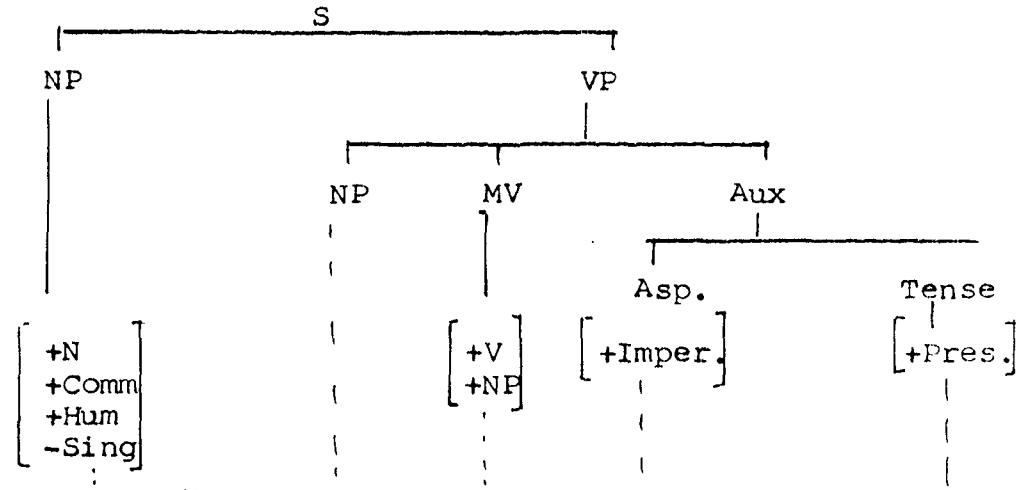
By Phonological:

Sentence -108 :



By Lexical rule :	sima	tainIs	khel	rah	tha
By Agreement rule :	sima	tainIs	khel	rahi	thi
Phonological rule :	sima	tainIs	khel	rahi	thi

Sentence-109 :



By Lexical rule :	larkiyã	git	ga	ta	hai
By Agreement rule :	larkiyã	git	ga	ti	hãi
By Phonological rule :	larkiyã	git	ga	ti	hãi

It has been pointed out earlier that stative verb ho 'be' (which has been referred to as coupla in most recent works) contains various forms. In general, stative verbs hai 'is' and thaa 'was' (and their inflected forms) are used to express indicative mood with no formal marker attached to them in simple indicative sentence. Besides, the other forms such as ho 'be' (unmarrked), hota 'be + imp' and hoga 'be + fut'. (and their inflected forms) are used variously to indicate contingent, subjunctive and presumptive mood respectively. These are used such as below :

110. lila ghar mẽ hai 'Leela is at home'

111. latā ghar mẽ hi thi 'Lata was even at home'

112. rām ghar mẽ ho to use bej dena 'Send Ram of he is at home'

113. pappu ghar par hotā to mujhe cāe pIlātā

'If Pappu were at home he would offer me tea'.

114. roshni ho rahi hai rām kamre mẽ hogā

'The light is on Ram must be at home'.

It seems to be indicative that if however, the stative verb is chosen as main verb, the tense auxiliary is obligatorily deleted by transformation.

The verbal agreement rule in Urdu/Hindi works in the following manner :

a. In general, verb shows agreement with unmarked subject

b. The verb agrees with a nearest unmarked noun, in case the subject is marked with a post-position.

c. The verb shows neutral agreement (third person mas.singular), in case there is no unmarked NP in the sentence.

Agreement in Urdu/Hindi accounts various types of transformation; verbal as well as auxiliary agreement transformation, participial agreement transformation and mood agreement transformation. Agreement transformation copies the features of person number of the subject or some other noun on to the verbal forms, auxiliaries, participials and/or moods in Urdu/Hindi.

To sum up the discussion, a verb phrase in Urdu/Hindi may be either simple or complex. In the foregoing discussion, the structure of the simple verb phrase has already been accounted. A brief account of the complex verb phrase follows here under and a detailed account will be taken in chapter-5.

The verb phrases, like noun phrases can optionally contain an embedded clause to function as verb phrase complement/verbal complement. Yet even this VP rule still ignores this possibility.

It can be argues that the possibility to include verbal complement in the PS rule of VP at this stage is detained only because of the simplicity and brevity of PS rule.

The possible transformation rules which are applicable to generate a simple sentence structure in Urdu/Hindi are such as below :

Participial transformation

Mood transformation

Case assignment transformation.

THE COMPLEMENT :

The term complement (for the sake of brevity and simplicity) has been used to refer to the carrier of various constituents that

are tied up with the verb in any way. The complement is expanded to provide various choices. It is exanded into optional post positional phrase and (i) a predicate complement or (ii) a post-positional phrases object/adverb (iii) double or single object, or (iv) an optional dative NP and predicate comp. with preverb.

The above information can be described in the following PS rules :

Comp. ⟶ (P Phrase) + { (Dat.) + Pred + (PV) / P Phrase / (NP ko/se) + (NP) }

Predicate ⟶ { Adj P / NP / Adv. P. }

Adv. ⟶ { Place / Manner / P Phrase }

P Phrase ⟶ NP + PP

PP ⟶ [+ { Purpose / Locational / Directional / Source / Genitive / Possessive / etc. } -]

Post-positions marked with the features of location, direction etc. are referred to adverbial phrases in the out put. Thus, the following sentences exemplify the various subcategories of verbs, which co-occur with items mentioned above :

Pred + Inactive V

115. rām acchi tarah hai 'Ram is well'

116. voh hoshyar nIklā 'He proved (to be) intelligent

117. yeh KItāb rām ki hai 'This book belongs to Ram'.

118. bacce ko bhuk lagi 'The child felt hungry.

P Phrase + Pred.

119. mohan mujh se Xafā hai 'Mohan is angry with me'.

120. rām ko sohan par aitmād hai 'Ram considers Shyam to be honest'.

Pred+PV

121. rām ko yeh qalam pasand hai 'Ram likes this pen'

122. bacce ko apni mā̃ yād āi 'The child remembered his mother'.

Pred+PV+Active V

123. bacce ne apnā sabaq yād kar liyā

'The child learned his lesson'.

124. usne meri tajviz manzur karli 'He accepted my proposal'.

NP ko + Pred + PV

125. rājā ne baccõ ko Ināmāt taqsim kiye

'The king distributed prizes to children'.

126. maĩ ne rām ko voh kItāb vāpas kardi

'I returned that book to Ram'.

Verbs such as lenā 'take' denā 'give' are used parallel to conjunct verb (e.g. karnā):

NP ko/se + Pred + PV

127. maĩ ne shilā ko voh kItāb vāpas dedi

'I returned that book to Sheela'.

128. usne mujhe kuch paisā qarz diyā hai

'He gave me some money on loan'.

129. maĩ ne rām se kuch paisā qarz liyā hai

'I took some money from Ram on loan'.

130. rām ne yeh ghoṛā shyam se mol liyā thā

Ram purchased this horse from Shyam'.

P Phrase + V

131. bandar peṛ par caṛhā	'The monkey climbed up the tree
132. rām mohan se mIlā	'Ram met Mohan'
133. cor ghar mẽ ghusā	'The cthief entered the house'
134. kUttā bIlli par jhapṭā	'The dog rushed on cat'.
135. kUttā sher se laṛā	'The dog querreled with lion.
136. voh āgre mẽ rahtā hai	'He lived in Agra'.

NP ko + V

137. usne bacce ko bUlāyā	'He invited the child'
138. latā ne lilā ko pukārā	'Lata called Leela'

Single NP (Unmarked) + V

139. rām ne ām khāyā	'Ram ate a mango
140. usne Xat paṛhā	'He read a letter'
141. rāju ne nashtā kar liyā	'Raju took his breakfast.

NP ko + NP :

142. shilā ne lilā ko ek kItāb di	'Sheela gave a book to Leela.
143. usne rāj ko khIlone bheje	'He sent toys to Raj'

NP se + NP

144. usne lilā se yeh savāl puchā	'He asked this question' from Leela'

145. latā ne shilā se sab bātẽ kIh di

'Leela said to Sheela everything'.

146. latā ne shilā se ek kItāb li	'Lata took a book from Sheela

P Phrase + NP

147. voh mujh se nafrat kartā hai	'He hates me'.

148. rumā allāh par bharosā karti hai 'Ruma trust on God'

149. jaj ne cor ko māf kiyā 'Judge excused the theif'

150. usne rām ki tarif ki 'He praised Ram

Zero NP + Intransitive

151. latā so gai 'Lata went to sleep

152. sohan abhi gayā hai 'Sohan has gone just now'

153. bacce ro rahe haĩ 'The children are weeping'.

ADVERB PHRASE :

In Urdu/Hindi, both, on functional and semantic ground adverbs are basic or derived : basic adverbs are very few items such as acānak, 'suddenly', bahut 'very', āj 'today' ab 'now' etc.

The derived adverbs that make a long list of items functioning as such in the sentence are post-positional phrases, verbal nouns, participial phrases, noun phrases, adjectives or even subordinate clauses.

In the present discussion only those adverbs will be taken into account that are used optionally as constituent of a VP in the deep structure.

In terms of meaning, the following sub-classes of adverbs are set up : time, place, manner, instrumental, reason, purpose, comitive, intensive and frequency.[15]

These are expressed by the following forms :

time : āj 'today', kal 'tomorrow' or yesterday, shāmko 'in the evening'.

Place : yahā̃, 'here', vahā̃ 'there', ghar mẽ 'at home', mez par 'on the table'.

Manner : acānak 'suddenly', āsānise 'easily', hoshyārise 'carefully'.

Instrumental : goli se 'with a bullot, cāqu se 'with a knife' qalam se 'witha a pen'

Reason : bimāri se 'because of illness', bhuk ki vajah se 'because of hunger'.

Purpose : X keliye 'for X'

Comitive : X ke sath 'with X'

Intensive : bahut, Xub, kāfi, 'very much' Itnā 'so much' aisā 'like this'

Frequency : am uman/āmtaur se/'usually/frequently' aksar 'often', zyādā tar 'mostly'.

These are illustrated in the following examples :

154. maĩ aj fUtbal . nahĩ khelũngā 'I will not play footbal today'

155. voh yahā̃ nahĩ ā tā hai 'He does not come here'

156. latā yakāyak bimār par gai 'Lata suddenly feel ill'.

157. usne cāqu se ām kāṭā 'He cut the mango with a knif'

158. voh bhuk se mar gayā 'He died because of hunger'

159. mohan mā̃ ke liye seb lāyā thā 'Mohan brought apples for mother'

160. maĩ ne rām ke sāth cāe pi 'I took tea with Ram'

161. rām bahut bimār hai 'Ram is very ill'

162. maĩ āmtaur se shām ko cāe pitā hũ

'I frequently take tea in the evening'.

Adverbs are used singly/or in a fluctuating order with respect to other adverbs. Adv. of time normally occurs before adv. of place. Adv. of frequency are normally used preceeding other adverb. However, intensive adverbs do not occur in fluctuating order with respect to other adverbs. It usually occurs attributively to modify a verb, adjuctive or some other adverb.

It seems reasonable to break down the place adverb into locational and directional adverbs. Location indicates the place where something is, while direction indicates motion to or from some place.[16] Adverbs of direction normally cooccurs with motion verbs. This is illustrated in the following :

163. rām dehli ko gayā hai 'Ram has gone to Delhi

164. maĩ ne rām ko dehli mẽ dekhā thā 'I saw Ram in Delhi'.

Sentence 163, indicates direction 164, indicates location. In terms of form adverbs have been classified as simple, complex and compound. Simple adverbs are referred to as one word adverbs such as abhi 'now' jaldi 'soon, yahã̃ 'here', acānak 'suddenly' etc. Also, adjectives that function as adverb (e.g. tez 'fast' Xamosh 'silient 'accha good', barā 'great') belong to this category. Complex adverbs are post positional phrases which are formed by attaching post-position to a noun of adj. e.g. mushkil se 'with difficulty', qalam se 'with pen', bimāri se 'because of illness.[17] Some phrases contain double post-position with a non e.g. N + ke andar 'inside' the X', N + ke sāth 'with! Some nouns that are constituent of a P phrases are usually derivied from adjectives e.g. āsāni is derived from āsān, bimāri from bimār etc. If however, two items of the same reference are used in adv. + adv. combination, these are said to be compound e.g. dhire dhire 'slowly slowly', jaldi jaldi 'hurrily' etc.

To sum up the discussion held so far; the adverbial phrase in Urdu/Hindi contains one or more adverbs or one or more post-positional phrases.

The rule that expands adv. P into various constituents would roughly look like :

$$\text{Adv. P} \longrightarrow \left\{\begin{matrix}\text{Adv.}\\ \text{P Phrase}\end{matrix}\right\} + \left\{\begin{matrix}\text{Adv.}\\ \text{P Phrase}\end{matrix}\right\} + \left\{\begin{matrix}\text{Adv.}\\ \text{P Phrase}\end{matrix}\right\}$$

$$\text{P Phrase} \longrightarrow \left[+ \left\{\begin{matrix}\text{Loc}\\ \text{Direc}\\ \text{Manner}\\ \text{Purpose etc.}\end{matrix}\right\} -\right]$$

It is to be noted that the noun of the NP and also the PP is marked for features of location, purpose etc.

In addition to, the adverbs which have already been sub categorized as adv. of time, location, direction, purpose etc. are also marked with the features such as [+time], [+location], [+direc], [+purp.] So on and so forth to get correct adverb in the output. The examples such as below are illustrative.

165. rām dhire dhire gā rahā thā 'Ram was singing slowly slowly'

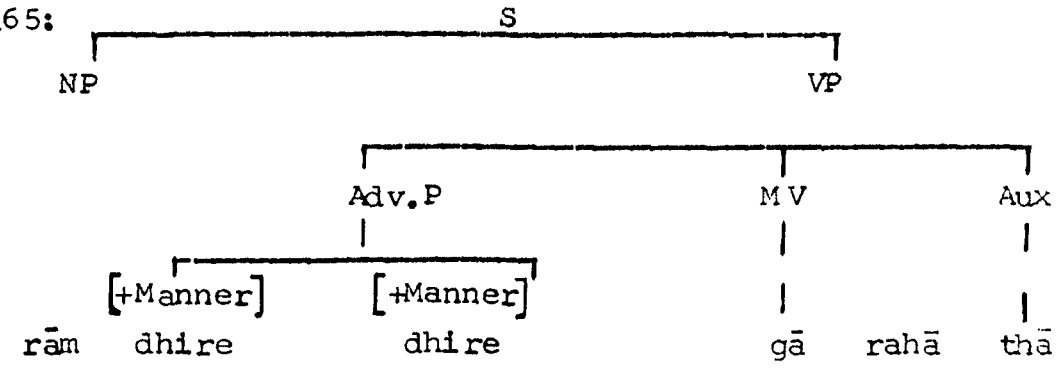
166. voh amuman rozānā yahī mIltā hai 'Usually he is found here daily'

167. maĩ āj shām ko mohan ke sāth dehli jāũgā

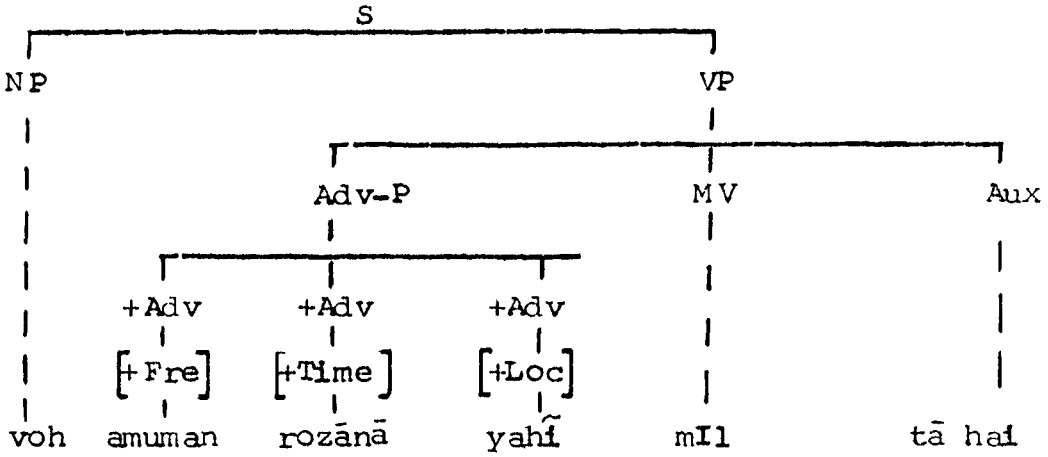
'I

The underlying structure of the adverbial phrases used in the above sentences would look as follows :

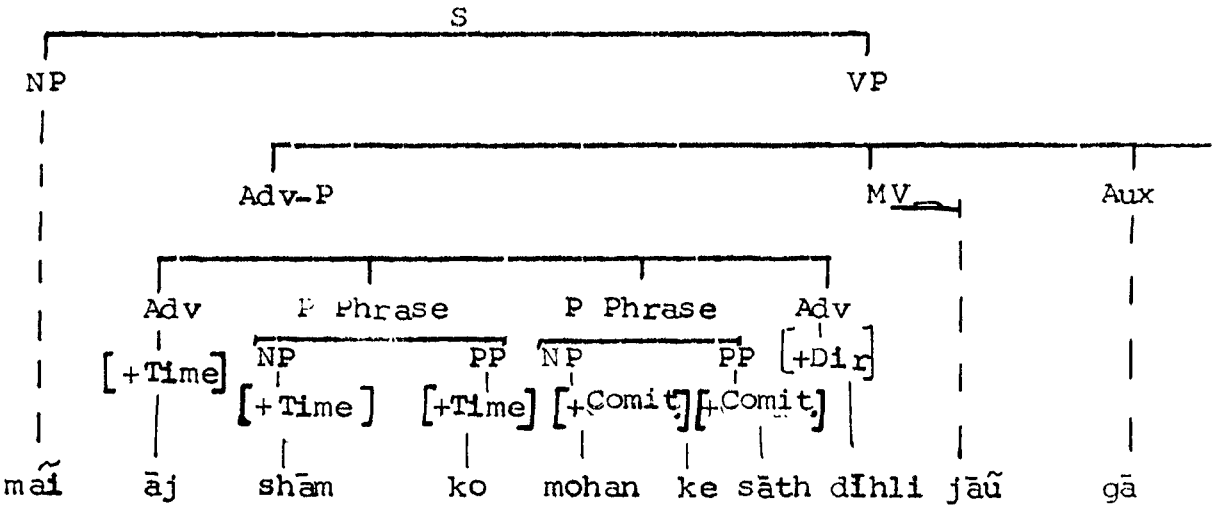
Sentence-165:



Sentence-166 :



Sentence-167 :



It can be argued that in Urdu, some prepositional phrases are also used variously to function as adv. of time, location, direction etc. Prepositional phrases which in Hindi are not used are for example, az Xud 'by self' az ɣaib 'by unknown power, az sare nau 'from the very beginning' bar mIhal, bar sare matlab 'for purpose', darasl 'infact', darhaqiqat 'infact, fIlhal 'at present(fIlhaqiqat 'infact', fisabilIllah 'for the sake of God' tāzIndagi 'till life' tā axIr 'till the end' tā vaqtekI ' till that time'.

Some examples of prepositional phrases are provided in the following sentences :

168. maĩ Is kItāb ko phIr az sare nau lIkhũgā

'I will again write this book from the very beginning'.

169. maĩ ne yeh kām fi sabilIllah kiyā hai

'I did this work for the sake of God'.

170. voh dar haqiqat ek nek Insān hai 'He is really a good man'

171. maĩ tā hayāt uskā mũh nahĩ dekhũgā'

'Till the end of my life, I will not meet him'.

In the above sentences az, fi, dar, ta and bar items are prepositions.

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2. Whitman, R.L. (1975:88).'English and Eng.Ling.following Lakoff, G. (1966:12).'Stative verbs and Adjective in English'. (Mimeo).
3. Kachru, Y.(1980:43). 'Aspects of Hindi Grammar'.
4. For Dative subject verbs, see Kachru (1980:63).
5. This set of verbs is distinct to the set of verbs given by Kachru (1980:63) in 'Aspects of Hindi Grammar'.
6. See Kachru (1980:52). 'For detailed discussion'.
7. Olphen, H.V. (1974:237-) 'Functional and non-functional'. Conjunct verbs in Hindi : IL Vol-34, No.4
   Kellogg (1939:271). 'A Grammar of the Hindi Language'.
   Bahl (1964:81-91). 'A study in transformational analysis of Hindi verbs'.
7. See Kachru (1968:83-) and (1980). 'For details
   Platts (1967: 378).'A Grammar of Hindustani or Urdu Language,
   & Bahl (1964:81-97). 'Rejected the concept of conjunct verbs completely.
9. Kachru (1980:57). 'Aspects of Hindi Grammar'.
10. A long list of operators has been proposed by Kellogg (1955) Platts (1973). Tamanna Imadi (1961) Abdul Haq (1983), Kachru (1980) etc. in Urdu and Hindi works.
11. The list of modal verbs varies from work to work. For a discussion of modals, see Kachru (1980:49), Guru (1920), and Bala Chandran (1973), 'Modal Auxiliaries in Hindi.
12. Kachru (1980:48). 'Set up two system of Aspects' : Primary and Secondary : Secondary is not theoritical. This however indicates a semantic notion and creates complexities with respect to primary system.
13. For categories of mood, see Kachru (1980:48) and Sharma (1958:). 'A basic grammar of modern Hindi'.
14. For passivization, see Kachru (1980:55) and Subbarao(1971:206). 'Notes on reflexivization in Hindi' : Papers on Hindi syntax Ed. by Kachru Vol-I, No.2.
15. Kachru (1980:79). 'Aspects of Hindi Grammar'.
16. Lester, Mark (1977:86). 'Introductory Transformational Grammar of English'.
17. In Guru, K.P. (1920). 'Hindi Vyakran', Postpositional Phrases are referred to as complex adverbs.

PART TWO

CLAUSES COMBINED BY EMBEDDING RULES :

A complex sentence is made up of two or more simple clauses/ sentences produced by a set of combining rules. The clause combining rules that generate a complex sentence by the process of embedding are termed as embedding rules. The embedding rules generate a complex sentence in which a clause is matrix (main) and the other is constituent or lower which is embedded in a higher (matrix) clause. Embedding makes an S a part of an other structure, such as an NP or VP.

In part two, are discussed the following types of embedding :

1. Clauses embedded in the noun phrase of an other clause (Chapter 3-5).
2. Clauses embedded in the verb phrase of an other clause (Chapter 6).
3. Clauses embedded in the adverbial phrases (Chapter 7).

CLAUSES EMBEDDED IN THE NOUN PHRASE :

This part will govern the ways in which clauses are embedded in other clauses. There are different ways that deal with the process of putting a clause in side the noun phrase of an other clause. The clauses that are embedded with in the NP of another clause, come to the surface either as full clauses or they are reduced to less than full clauses i.e. phrases. The underlying embedded clauses that are transformed into surface forms, deal with distinct processes :

i. Noun modification

ii. NP-complementation

iii. Causativization.

To generate a modifier, chapter three deals with the process of modification. By this process, a noun is modified by an embedded clause and this modifying clause that comes to the surface in a variety of ways, functions as a modifier. Noun modification takes place, if the Noun of that NP which dominates the embedded clause share the features of the noun of the NP of embedded clause.

Chapter four is concerned with the process of nominalization i.e. NP-complementation. By the process of nominalization, an embedded clause that has come to the surface, is said to function as NP-complement. However, the condition for NP-complementation rules are satisfied in this way : The noun dominated by the NP which dominates the embedded clause must be distinct from the noun dominated by the NP of the embedded clause.

Chapter five concentrates on the problems of causativization and gives a detailed account of direct and indirect causal constructions in Urdu/Hindi.

CHAPTER-III

NOUN MODIFICATION

Noun modification is built in the grammar of Urdu/Hindi by the condition of coreferentiality which permits a noun to be modified by an embedded S. By this process of noun modification, sentences embedded in a NP come to the surface as modifiers that modify the noun, identical and coreferential with the noun of embedded S. It is noted that if the embedded modifying clause contains stative ho 'be' as MV, can be transformed to yield either an adjective, possessive N, or noun in apposition, which is said to function as modifier. On the other hand, if an embedded clause does not contain ho 'be' as MV, yields a participial or relative clause. The modifiers that occur before noun are called Pre-NP modifiers and those that occur after the noun are termed as post-NP modifiers. Some examples are provided such as follows :

(1) mãĩ ne ek safed bIlli dekhi

' I saw a white cate' .

(2) bacc̃one ek uṛti hui cIṛiya pakṛi

'The children caught a bird flying.

(3) rām ka naukar bimār hai

' Ram's servant is unwell '

(4) rām ne merā ghoṛā xarid liyā̃

'Ram bought my house'.

(5) latā̃ ne apnā kām kar liyā̃.

'Lata has finished her work.'

(6) voh laṛkā jo āgre se āyā hai bimār hai

'The boy who came from Agra is not well'.

(7) jo laṛkā āgre se āyā hai voh bimār hai.

'The boy who came from Agra is not well'.

(8) mIsṭar xān, sadr shobae lisanyat, āj landan cale gae.

'Mr. Khan, head, department of linguistics, left for London today.

(9) Paṇḍit sundarlāl āgre mẽ̃ rahte hai̇̃

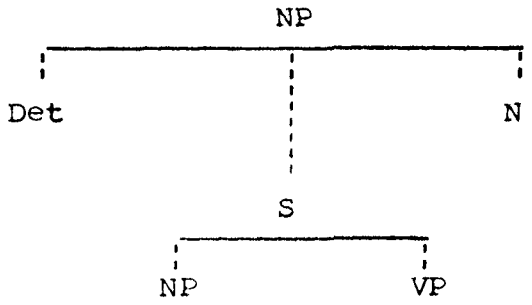
'Pandit Sundarlal lives in Agra'.

Modifiers before nouns as given in 1-5, are adjective, participle, possessive noun, pronoun and possessive reflexive. As far as the relative clauses and noun in apposition are concerned, they are seen to occur either before or after the modified nouns, such as in 6-9.

The basic aim of this approach to noun modification is that all the modifiers are derived from underlying full sentences that make an assertion about the noun that they modify. Let us again clarify the condition for the application of noun modification rule such as the following: the noun in

the embedded clause must be identical to the noun being modified in the matrix clause.

There are various types of noun modification in Urdu/Hindi depending on how the underlying structure such as



results in any of the following ways :

(i) A Relative Clause

(ii) A Participial modifier

(iii) An Adjectival modifier

(iv) Noun in apposition

(v) A possessive phrase

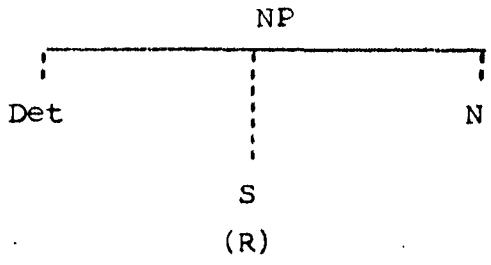
Relative Clause

An underlying clause embedded into NP when undergoes the transformations to restrict the reference of the antecedent or head noun is called a 'Relative Clause'. It seems to be justified if we maintain that the relative clauses in Urdu/Hindi are instances of noun modification. The distinguishing

characteristic of the relative clauses is that they do not delete j-element as well as VP, unlike other modifiers. As regards the derivation of a relative clause, the conditions for the application of Relative Transformation which seem to be quite general. The N dominated by the NP of constituent clause must be identical with the N dominated by the NP which dominates the constituent clause.

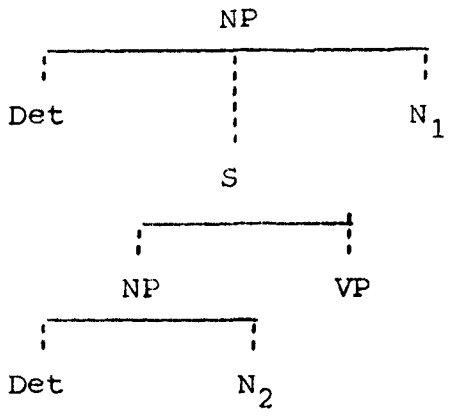
The process involved in the derivation of a relative clause meets satisfactorily, if the provided conditions are not unsatisfactory. The respective nouns must share common features, no matter what ever the function of the NP of a matrix and a constituent clause is.

All the R-clauses in Urdu/Hindi that are seen to occur in different distributional occurrences are derived from an underlying structure of the following type:

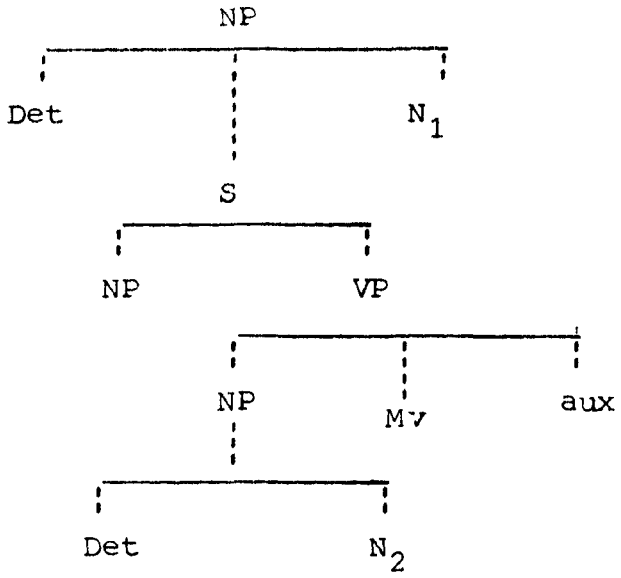


That is, under noted structural diagrams will show that N_1 and N_2 must be identical:

(a)



(b)



Some examples of coreferential nouns involved in the main and R-clause are provided by the following sentences :

1. Voh log hameshā dukhi rahte haĩ jo dusrõ par bharosā karte haĩ ' They are always in trouble who depend upon others'.

2. Voh ghoṛa margayā jo maĩ ne kalkatte se xaridā tha ' The horse dies whom I purchased at Calcutta'.

3. Keval vohi log āe jĩnko maĩ ne xat lĩkhā

' Only those persons came to whom I wrote (a) letter!

4. Voh laṛki kahā̃ hai jĩskā bhāi āgre mẽ hai.

'Where is that girl whose brother is in Agra'.

5. maĩ ne vohi kĩtābe mā̃gāi hai jo bhārat mẽ nahi mĩlti

'I have ordered for those books which are not available in India'.

6. rām ne us kutte ki tā̃g toṛdi jĩsne mujhe kāṭā thā

'Ram broke the leg of the dog who bit me'.

7. maĩ usi makān mẽ rahtā hũ jĩsmẽ rām thā

'I live in that house in which Ram lived'.

In sentence 1, both matrix and R-clauses, contain subject NP log 'people'. In sentence 2, matrix clause contains subject NP ghoṛā 'horse' and R. Clause contains D. object NP ghoṛā. In sentences 3, NP log is subject in the matrix clause but the same NP in R-clause functions as indirect object. The matrix clause in sentence 4 contains laṛki 'girls' as subject NP and in R-clause laṛki is possesser N of the possessive phrase. In sentence 5, matrix clause contains kĩtāb 'books' as object NP. In sentence 6, NP laṛke 'boys' is the indirect object of the matrix clause and the same is the subject of R-clause. In sentence 7 matrix clause contains possessive phrase such as Us Kutte Ki tā̃g 'leg of the dog' and R-clause contains Kutta 'dog' as subject NP. In sentence 8, both matrix and R-clause contain post positional phrase makān mẽ 'in the house'.

An examination of the above examples makes it clear that the coreferential nouns in either clause may be subject, direct object, indirect object, post positional object or a possessive.

Relative clauses in Urdu/Hindi are of two types : Restrictive Relative Clause (RR) and Non-restrictive Relative Clause (NR). A non-restrictive Relative Clause always follows the noun directly, to which it modifiers, but a Restrictive Relative (RR) may have three distributional occurrences and may take any of three positions[1]. It can occur immediately after the modified noun (like NR), it can occur before the matrix clause, or it can occur after the matrix clause. According to its occurence in the sentence, NR is very similar to sentence-medial RR clause. Notice that the extraposition in Urdu/Hindi is totally impossible with a NR.

Consider the examples, such as the following :

9. mɪsṭar xan, jo jāmiā ke shaix haĩ, sadar hogae

'Mr. Khan, who is the Vice-Chancellor of Jamia became the President of (India)

10. jo laṛkā bimār thā voh āj cal basā

'The boy who was sick, died today'.

11. voh laṛkā āj margayā jo aspatāl mẽ thā

'The boy died today who was in hospital'.

12. voh laṛkā jo aspatāl mẽ thā āj calbasā.

'The boy who was in hospital died today'.

Sentence 9 contains NR relative clause and 10-12 contain RR.

Mrs. Kachru emphasizes the general non occurrence of sentence-medial relative clause. There is some evidence to support the claim that RR can occupy any of three positions in the sentence.

Donaldson (1971)[2] in her treatment of Relative clauses does not oppose the sentence-medial position of Relative clauses.

The RR rarely occur with proper nouns because of their (proper N) unique reference. If there were more than one person of a single name at a time, the RR, in fact, can occur with them to individualize one of them. For instance, the sentence is noted below :

13. Profaisar xān jo kālej mẽ bhāshā vIgyān paṛhāte haĩ aj amrikā cale gae

' Professor Khan who teaches linguistics in the University went to America today.

RR can occur with either definite or indefinite determiner, but RR with indefinite determiner can not occur in sentence initial and medial position e.g.

14. maĩ ne ek kabutɖr pakṛā jo bahut xubsurat thā.

'I caught a pigeon which was very beautiful'.

15. * maĩ ne ek kabutɖr jo bahut xubsurat tha pakṛā.

' I a pigeon which was very beautiful was caught'.

16. * jo kabutor bahut xubsurat tha mai ne ek kabutar pakra.

' Which pigeon very beautiful was I a pegion caught'.

However, the R-clause sentence-medial position is not ill-formed:

koi bhi larkā jīse naukri cāhie mere pās ā jāe

NR is always used in apposition to the noun it modifies. It can occur after both proper and common nouns. It provides an extra and inessential information to what has already been said about the particular noun. RR clause that are usually called Relative clauses, on the other hand, differ in their behaviour. They play a determining role. They identify the noun to which they refer. As we shall see in the following discussion that the determiners and RR are also linked in Urdu/Hindi. There is a rule in Urdu/Hindi that the coreferential noun is deleted from either clause (main or embedded) whichever occurs finally in the sentence.

However, the role of determiners in such a constructions in Urdu/Hindi is very interesting. The identical noun is deleted from second clause and only a pronominal appears in NP position. If the R-clause appears initially, the distant third person voh 'he' (or its variants) occurs in the following clause, if the matrix clause is in initial position then the relative pronoun jo 'who' (or variants) occurs in the embedded clause. In these complex sentences, jo and voh play two roles : if jo is NP in

second clause voh will act as a determiner [+ definite, + distant] in first clause; if voh occurs as NP in second clause, jo will act as determiner (relative determiner) in the first clause. The determiner [+ definite, + distant] voh and III person pronoun voh 'he' are similar in phonetic form. Similarly jo plays two roles : relative pronoun and relative determiner. It is noted that jo and voh will act as determiner if occur before noun, if in isolation under NP node, they are themselves NPs of clauses. Jo and Voh will act as NP only in second clause and as determiner always in first clause.[3]

In the following examples, the deletion of repeated N from second clause is illustrated :

Voh laṛkā margayā jo bimār thā.

'The boy who was sick died'.

jo laṛkā patra līkh rahā hai voh kalkatte se āyā hai.

'The boy who is writing a letter has come from Calcutta'.

It is not clear how the following usages of jo could be treated systematically in the grammer of Urdu/Hindi. Usually they have been treated as idiomatic.

Consider the examples, such as the following :

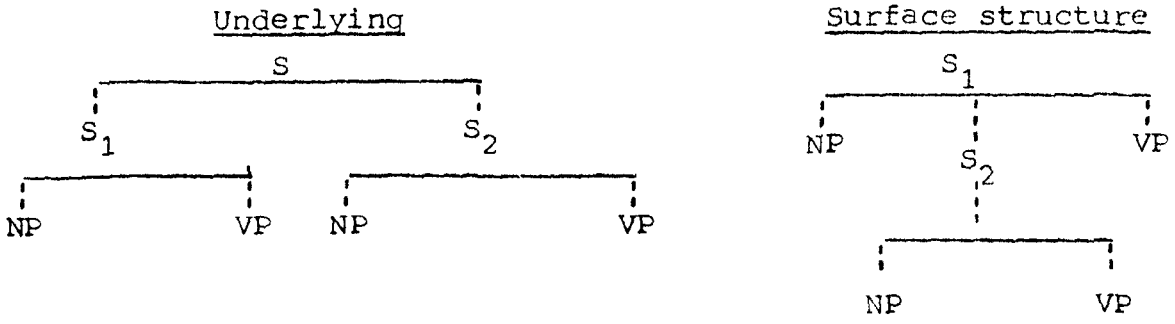
jIsko piya cāhai (voh) suhāgan rahe

jo boyā so kata

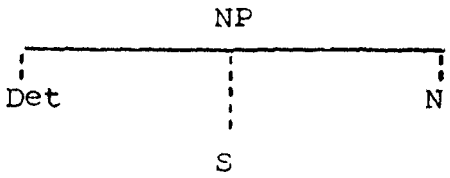
jo huā so huā

jo baraste haĩ voh garajte nahĩ

It is noted that NR embedded sentences originate as independent sentences in the deep structure. They can be removed without changing the meaning of the sentences in which they appear. They are not embedded inside the noun phrases but rather are adjoined to NPs by transformation. When two compound sentences exist side by side in deep structure, NR clause transformation introduces one of these sentences into the other immediately after a NP. NR clause transformation operates on a structure of the following sort :



On the other hand, RR originate in side the NP of another S. The Relative clause Transformation operates on a structure of the type :



It is noted that if a RR, unlike NR, is removed from the sentence, the meaning of the sentence in which it appears will be completely changed.

In her analysis of the relative clause in Hindi, Kachru adopts the process of embedding for the generation of relatives. According to her, the relative clause is the result of an optional expansion of NP in the deep structure which is later moved to be the left daughter of the determiner for the modified noun.

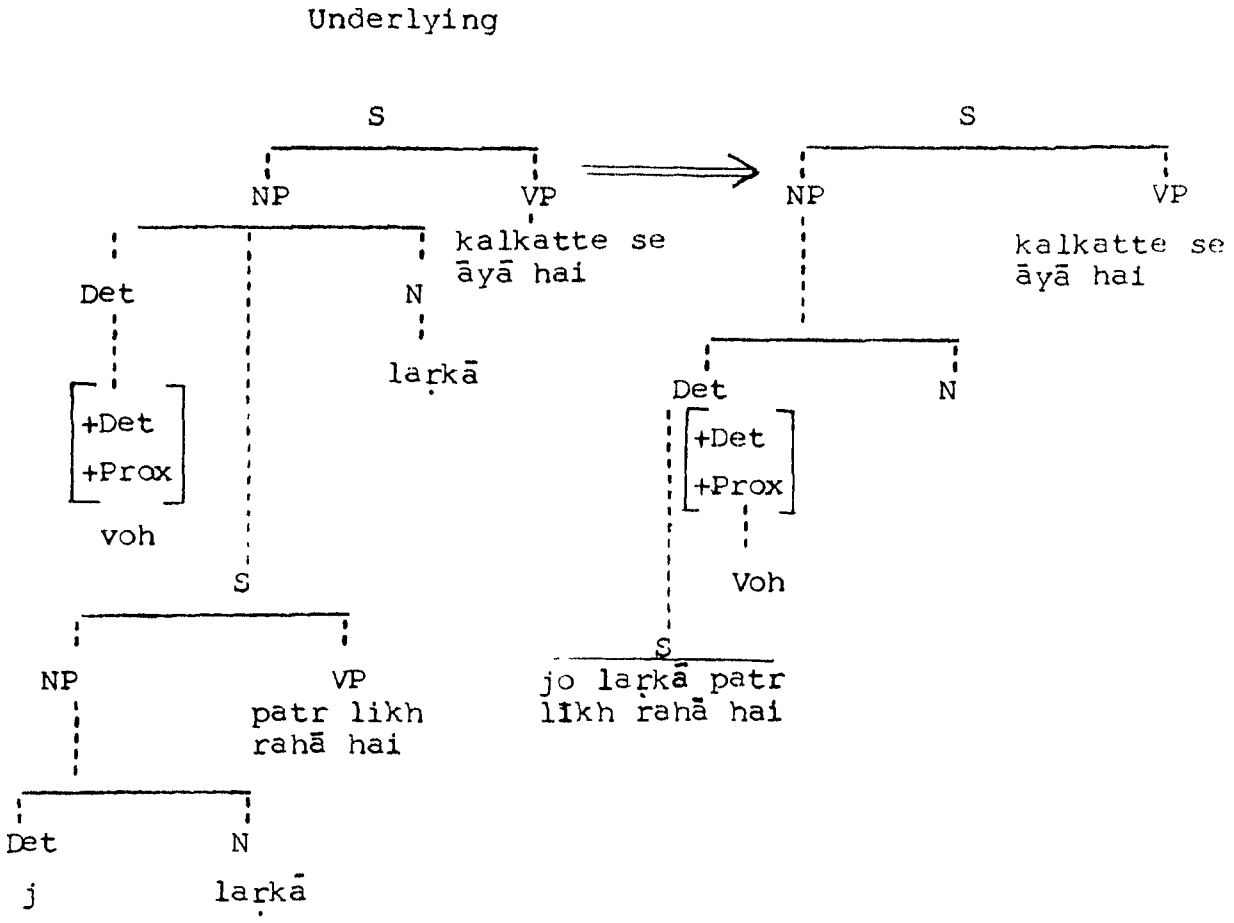
Professor Kachru (1966:99) states:[4]

The process of generating a complex sentence with a relative clause is as follows :

I. Permute the Def. Det of the Matrix S. with the embedded S.

II. Delete the repeated N.

She applied these two rules to the underlying structure for the generation of relatives :



It seems to be obvious that it is not just permutation of the determiner and relative that is involved but rather daughter adjunction of the relative to the determiner[5].

It is noted that the permutation is a rule that operates entirely, within a sentence, while Kachru's permutation is a rule that operates between two sentences in that it changes the original position of the determiner of higher S and makes the embedded clause a part of determiner of higher S.

She further argues in support of her claim that the basic order of the relative is sentence initial position, if the noun is in subject position in the main clause. It is not correct that the basic order of the relatives is sentence initial position. It may occur in three distributional occurences, as mentioned above, rather than preceding main clause. The basic aim of an analyst is to set up the underlying structure of the sentence and to formulate the rules for the generation of a surface sentence, rather than fixing up its surface form from its underlying, position. It is noted that the positional occurence of relative clause within the sentence is the choice of speaker depending upon the criteria of acceptability rather than proposing basic order for one of the distributional occurrences of R-clause in the sentence. The greater freedom is exercised by the speaker in his choice of position within the sentence for the relative clause. There is strong evidence in Urdu/Hindi, to

support the claim that the noun is in subject position in the main clause and the relative clause may occur either sentence-initial, medial or final position. Let us consider the examples such as the following :

17. voh laṛkā merā choṭā bhāi hai jo mere pās rahtā hai.
'The boy who is living with me is my little brother'.

18. jo laṛkā bimār thā voh ab ṭhik hai.
'The boy who had been ill is now well'.

19. voh laṛkā jo bimār thā ab ṭhik hai.
'The boy who was ill is now well'.

Mrs. Kachru has also claimed that when the modified noun is not the subject N but either it is an object N or a post-positional object, the relative clause will not preced the modified noun rather it follows the matrix S, and an obligatory transformation, i.e. topicalization of the main clause, which moves to sentence initial position, takes place. She further states that if noun modified is preceded by an indefinite determiner, the relative clause extraposes beyond the main clause. Mrs. Kachru has employed two distinct operations for surfacing the relative clause to the end of the sentence. In one case she takes main clause and places it before R-clause and in other case, she manipulates the R-clause which is extraposed to the end of the main clause.

It is neither justified nor convincing that the relative

clause occurring in the sentence-final position is handled by two different operations. It could be argued that in such a case only one cyclic rule, i.e. the extraposition transformation can be applied to generate the final position of the relative.

It has been emphasized by Mrs. Kachru that when the modified noun in the main clause is not in subject position the relative clause does not occur in sentence initial position. But she offers no syntectic argument for this proposal. The examples of grammatical sentences beginning with a relative, modifying the main clause object noun or post-positional object are noted below :

20. jo log is makān mẽ rahte haĩ ham unhẽ acchi tarah jānte haĩ.
'The people who live in this house are known by us very well'

21. jis bas mẽ ham the usi mẽ rām thā.
'Ram was in the same bus in which we were'.

In sentence (20) the modified noun log 'people' is in object position in the main clause and in (21) the modified noun bas 'buss' is post positional object in the main clause and the sentence-initial occurrence of R-clause in sentence 20 and 21 is not far beyond the acceptability.

Other instances of R-clauses are provided by sentences such as the following :

1. Subj of S_1 and S_2

a) voh laṛkā ab āgre mẽ hai jo mere pās rehtā thā.

b) jo laṛkā mere pās rahtā thā voh ab āgre mẽ hai.

c) voh laṛkā jo mere pās rahtā thā ab āgre mẽ hai.

'The boy who lived with me is now in Agra'.

2. Subj of S_1 and P phrase of S_2

a) yeh daur acchā nahĩ hai jĩsmẽ ham rahte haĩ.

b) jĩs daur mẽ ham rahte haĩ voh acchā nahĩ.

c) yeh daur jĩs mẽ ham rahte haĩ acchā nahĩ.

'This age in which we live is not peaceful.

3. Subj of S_1: Poss of S_2

a) voh laṛki Iskul nahĩ gayi jIski yeh kĩtāb hai.

b) jĩs laṛki ki yeh kItāb hai Iskul nahĩ gayi.

c) voh laṛki jIski yeh kItāb hai Iskul nahi gayi

4. P phrase of S_1: Subj of S_2

a) maĩ Us kamre mẽ rahtā hũ jo bahut choṭā hai.

b) jo kamrā bahut choṭā hai maĩ Usmẽ rahtā hũ.

'I live in that room which is too short'.

5. P phrase of S_1: P phrase of S_2

a) baccā Us kursi par baiṭhā thā jĩs par adhyāpak baiṭhtā hai.

b) jIs kUrsi par adhyāpak baiṭhtā hai Us par baccā baiṭhā thā.

6. Poss of S_1 : Sub of S_2

a) Us laṛke kā bhāi āyā hai jo merā dost hai.

b) Jo laṛkā merā dost hai uskā bhāi āyā hai.

'The brother of the boy who is my friend has come'.

7. Poss of S_1: P Phrase of S_2

a) Us ghar ki chat gIr gai JIsmẽ rām rahtā thā.

b) JIs ghar mẽ rām rahtā thā Us ki chat gIr gai.

'The roof of the house in which ram lived collapsed'.

The process of Relativization in Urdu/Hindi, thus involves the following rules :

1. Relative Transformation.
2. Equi-NP Deletion rule.
3. Extraposition.
4. Relative clause Fronting Rule.
5. Topicalization.
6. Object Preposing rule.

Relative transformation in Urdu/Hindi is a rule which is ordered before all other cyclic rules. It basically deals with the process of substitution. The rule applies to the embedded clause converting definite determiner voh 'that' to jo 'which'.

Additionally, if the noun modified in the main clause is preceded by indefinite or zero determiner, the referential noun in the relative clause will be preceded by J-element.

Equi-NP Deletion rule

By Equi-NP deletion rule, the indentical noun is deleted from second clause, leaving the determiner behind as a pronominal marker rather than substituting a pronoun for the deleted noun. It is preceded by other cyclic rules which take place for positioning the relative clause within the sentence.

Extraposition

In the structure where R-clause occurs after the main clause, the extraposition transformation applies. The application of this rule produce the intermediate structure by moving embedded clause from its previous occupied place. When the embedded clause is moved by extraposition, it may move only to the end of the clause in which it originates[6]. The extraposition is followed by an optional Object preposing rule if it is required in order to deal with the movement of constituent within a clause i.e. relative clause.

Relative clause Fronting rule :

A quite distinct operation, i.e. R-clause Fronting Rule takes place' if we get a structure in which R-clause is followed

by the main clause. The R-clause 'Fronting rule' moves the embedded clause to the first position of the main clause. It is preceded by only Relative transformation and followed by Equi-NP deletion. If there is a rule that positions the relativized constituent within the R-clause, this will take place first after R-clause fronting rule and Equi-NP deletion will operate after it.

Topicalization.

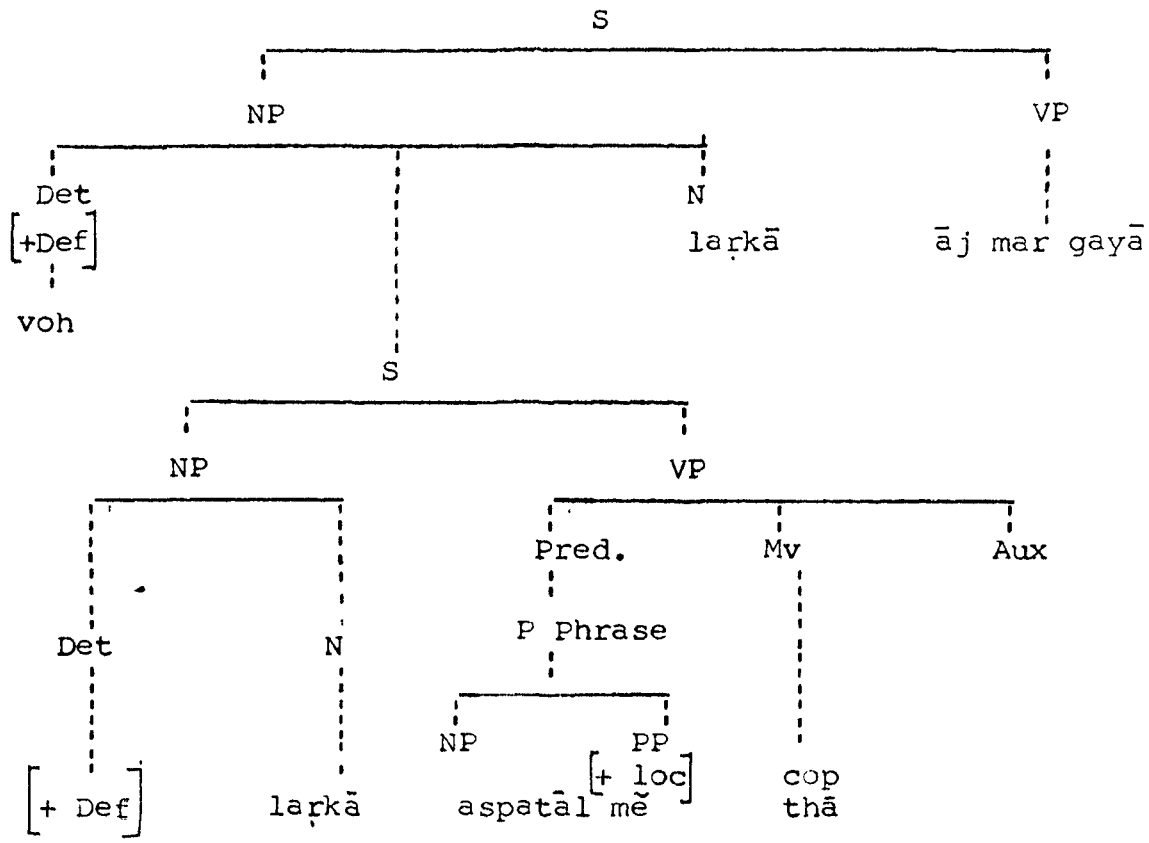
In the structure where R-clause occurs in sentence medial position, there is an obligatory transformation called Topicalization[7] of subject N, which moves the subject N of the higher clause to the front of the lower S, that is, it preposes the subj N of matrix clause to the front of the embedded clause. It is preceded by Relative Transformation and followed by Equi-NP deletion. Extraposition and R-clause fronting Rule do not operate on a single string where one occurs the other does not.

Object Preposing rule

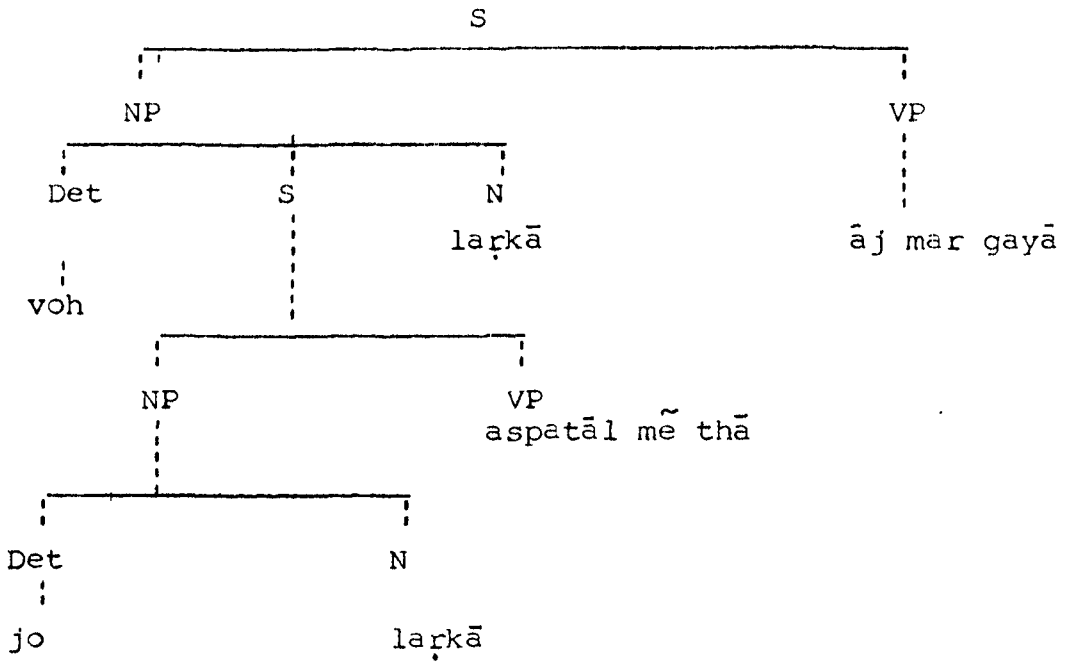
Object preposing rule applies optionally to the embedded clause, moving the object NP/post positional object (Relative Det + N (PP) to the first of the embedded clause. If there is a rule that positions the R-clause within the sentence, object preposing rule must occur after it. It is ordered before Equi-NP deletion and after all other cyclic rules. 'Object preposing'

rule must apply to the structure where J-element plus an optional post position is seen to occur just before a verb or the relati- vized forms indicate the expression of time and place.

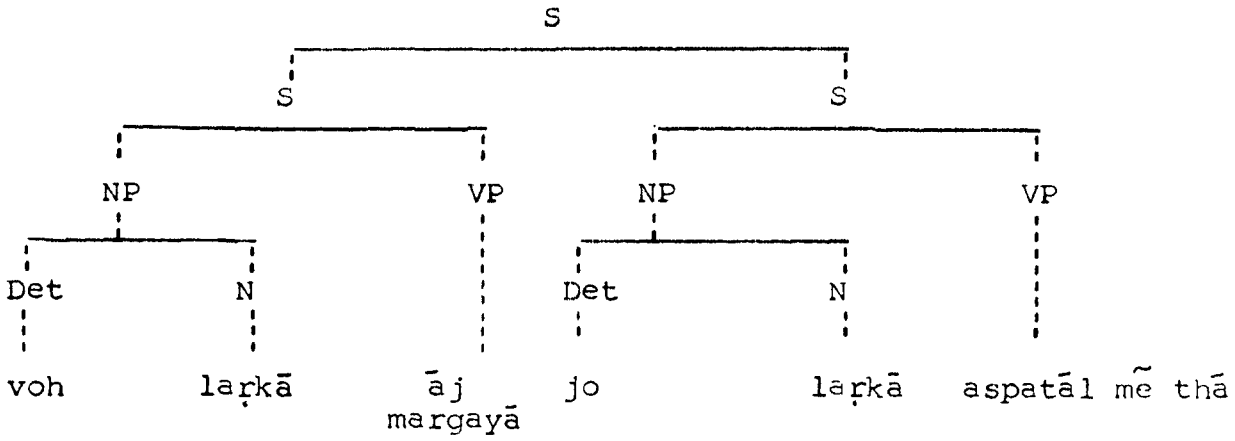
The rules as formulated above are applied to generate the noted above sentences to illustrate how the rules work. The underlying representation of the sentences such as 1,11 and 17 is as follows :



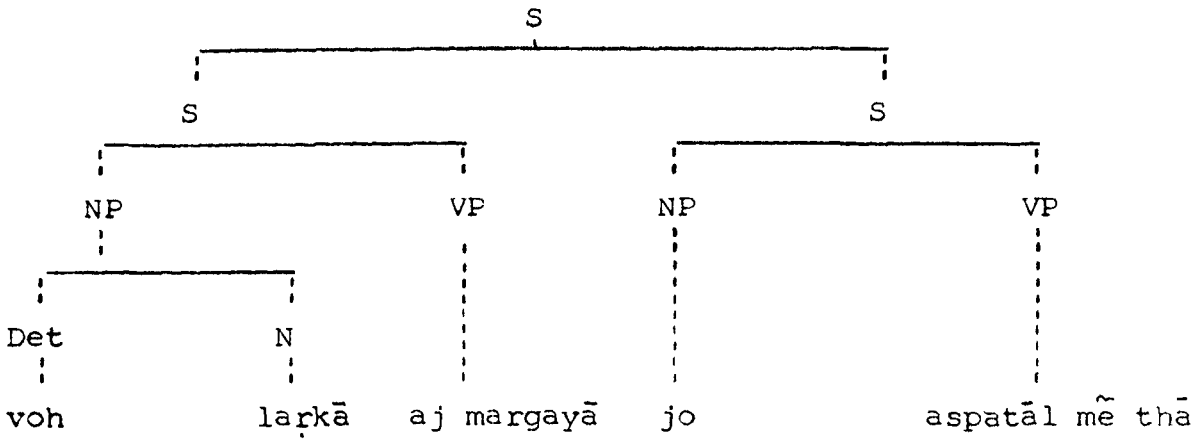
The application of Relative Transformation yields the structure such as :



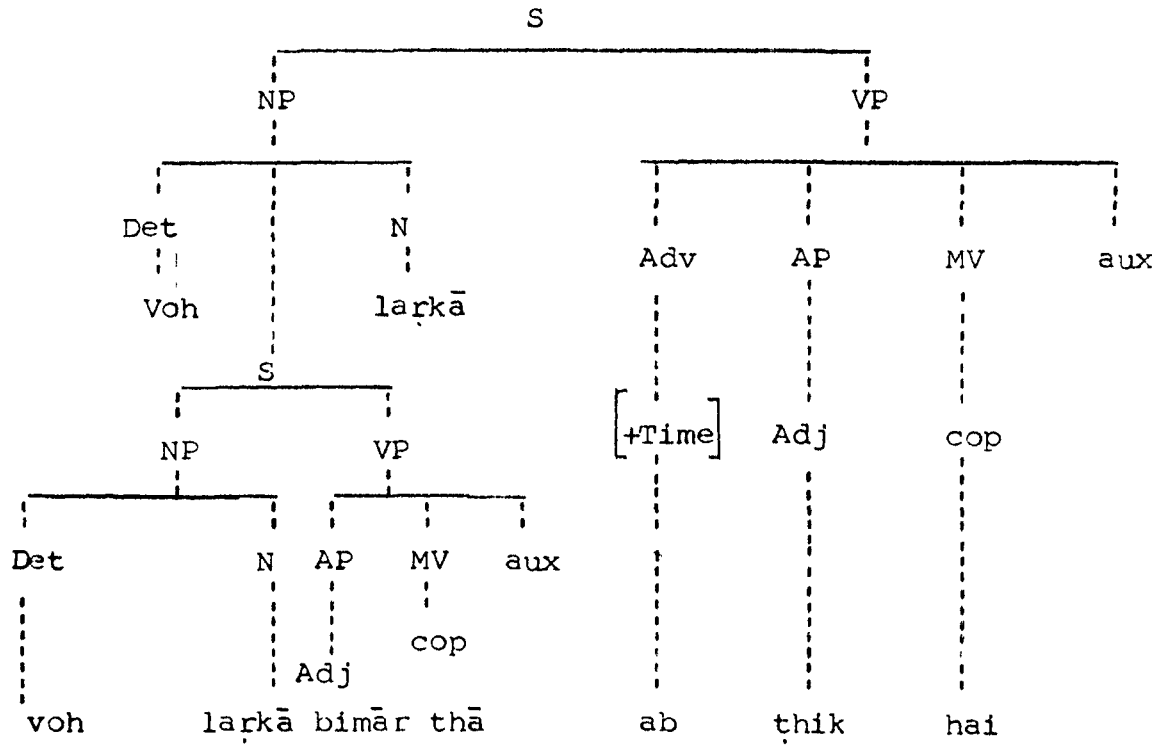
By extraposition the original position of embedded clause is changed, moving it to the end of the higher clause. The yielded structure looks on follows :



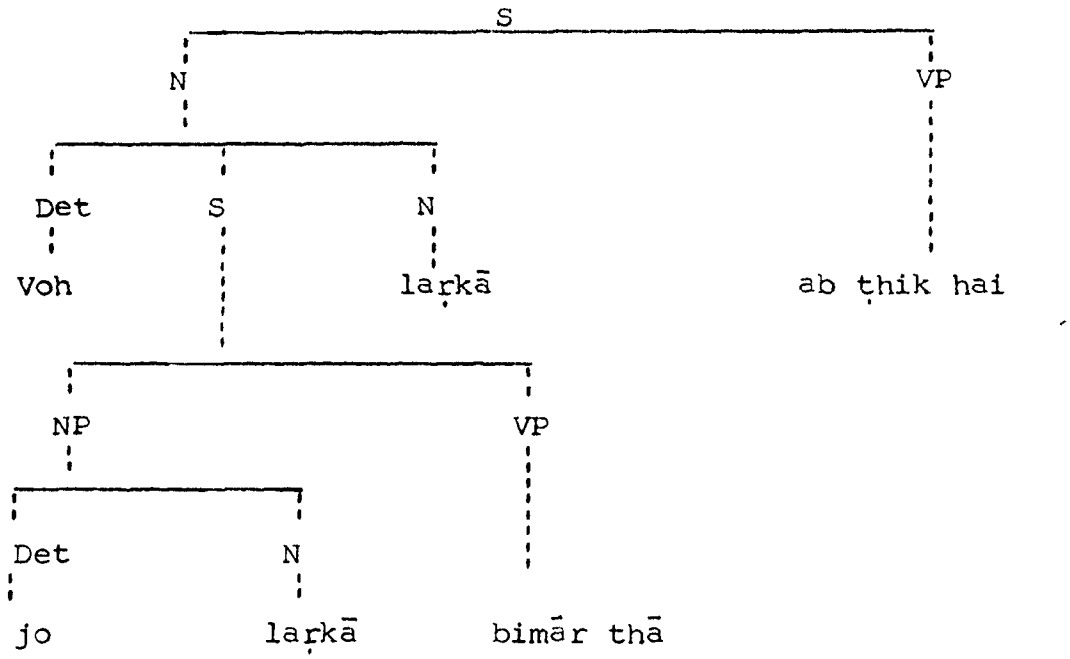
By Equi-NP deletion, the identical N from second clause is deleted. The obtained surface structure after relevant phonological rule looks like :



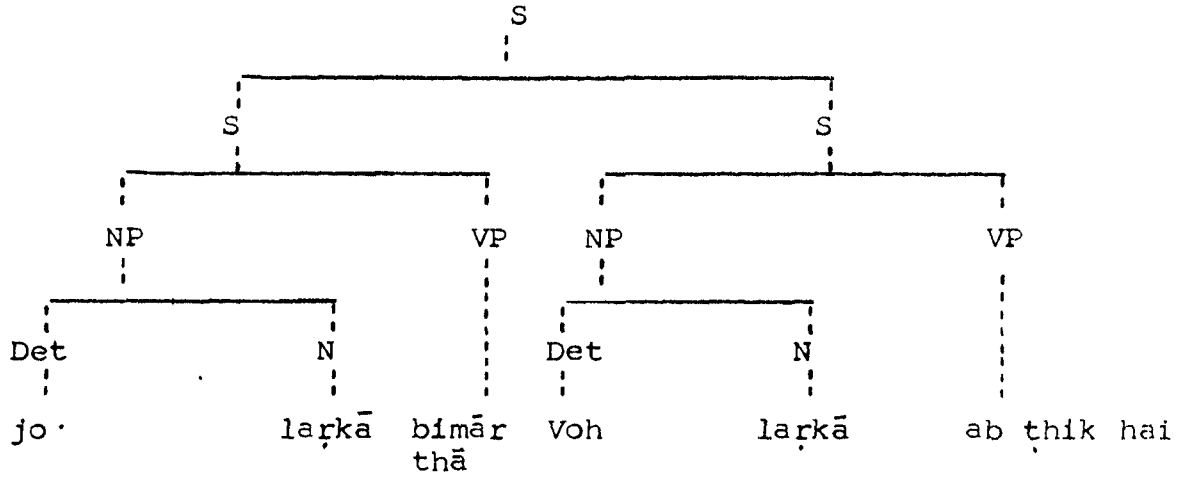
The deep structure of sentences such (10) and (18) is as follows :



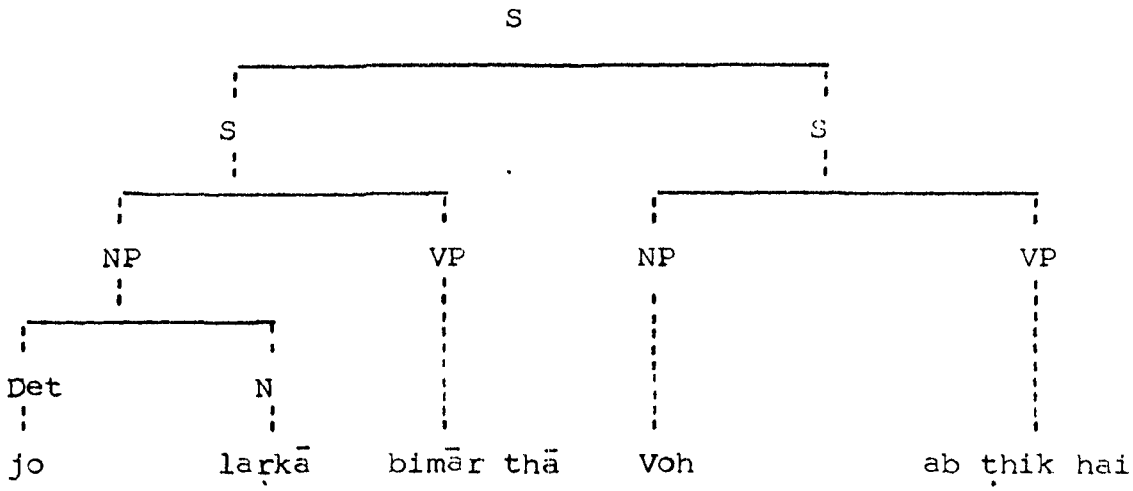
After Relative Transformation we obtain



via Relative clause "fronting rule", the lower clause is moved to the initial position of the matrix clause. After R-clause 'Front Rule', the resulting structure would look like :



By Equi-NP deletion we get the surface form such as the following :



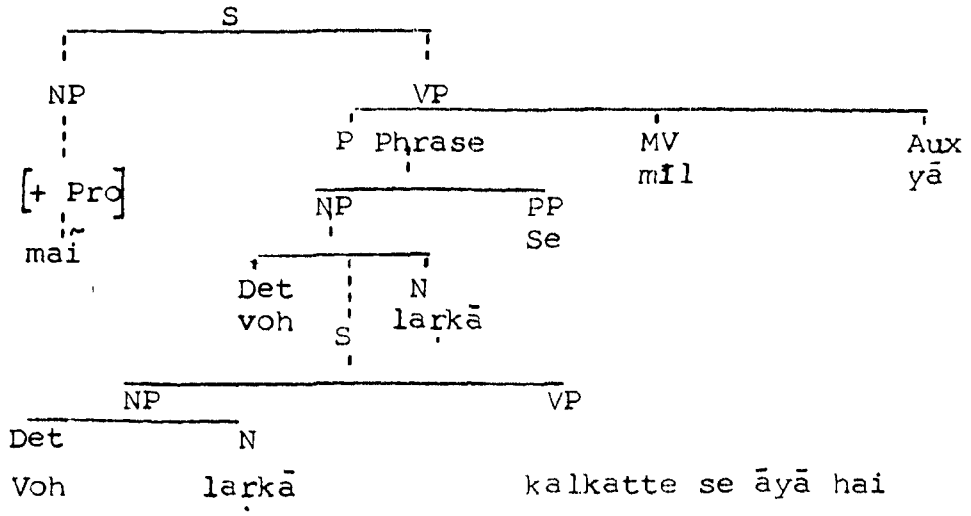
The phonoiogical rules are applied to interprete the spoken form to each surface structure after last cyclic rule as well as after post cyclic rules ,, i.e. Case marking rules.

The sentences in which modified noun occurs in object position or a post positional object as in:

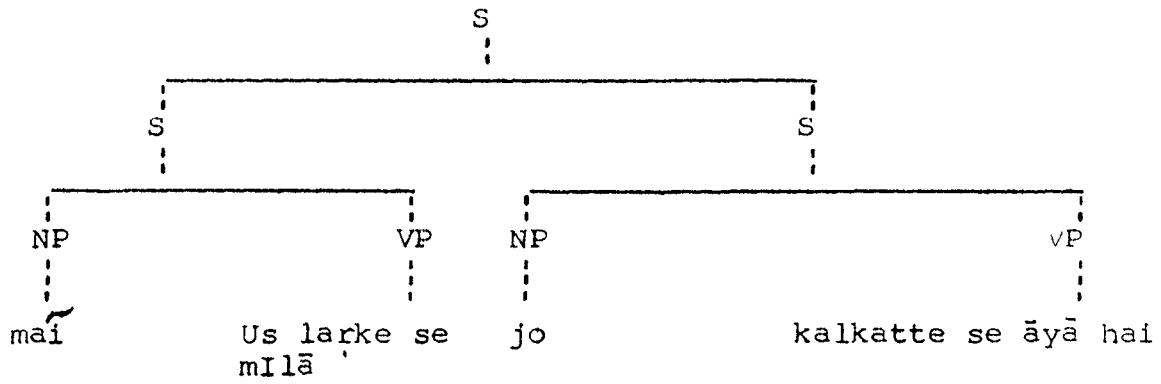
22. mai Us larke se mIlā jo kalkatte se āyā hai.
'I met the boy who came from Calcutta'.

23. mai ne voh ām xaride jo kacce the
'I bought those mangoes which were not ripe'.

The underlying tree representation would be :



Application of the rules, Relative transformation, Extra-position and Noun Deletion produce the surface structure such as :



The examples in which R-clause is seen to occur in sentence medial position are :

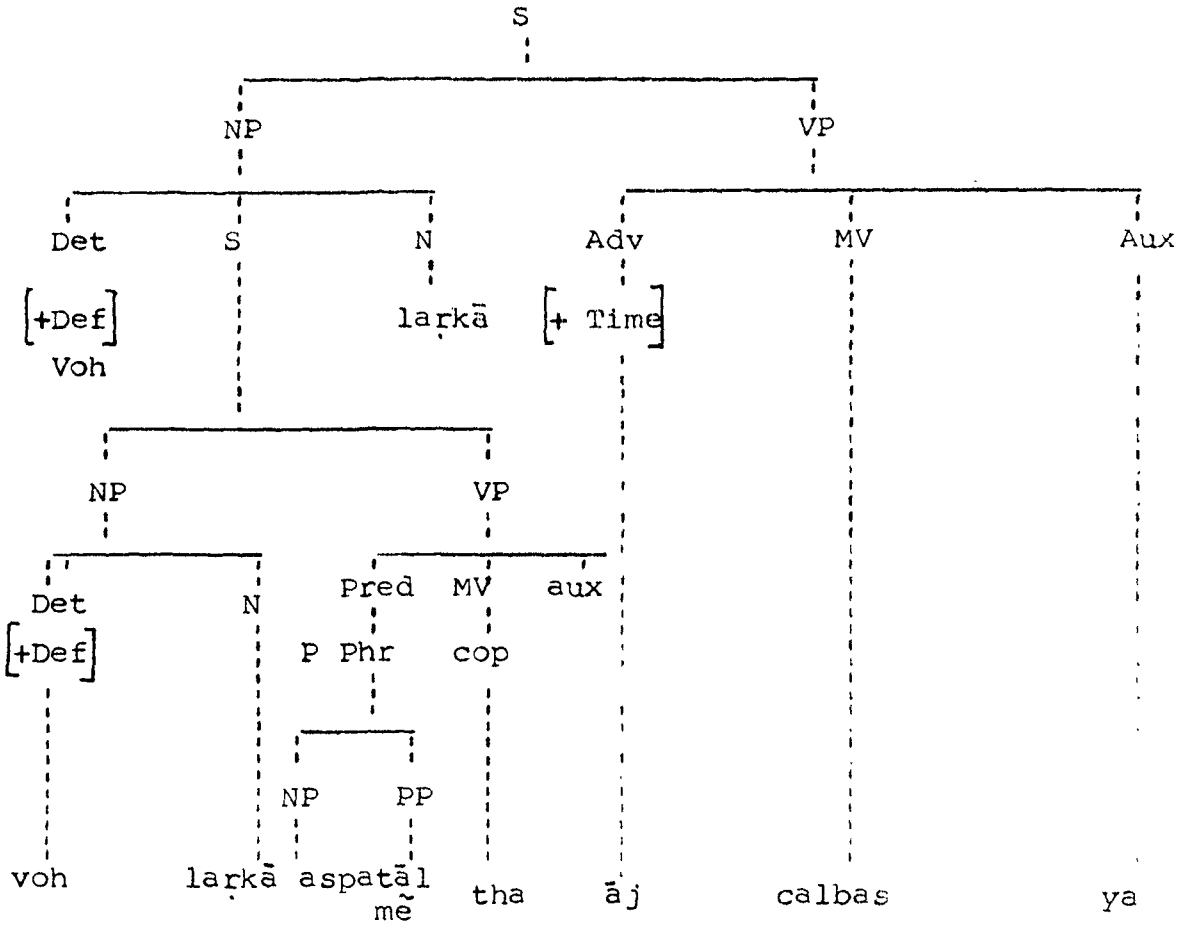
24. voh log jo dusrõ par bharosā karte haĩ kabhi sukhi nahĩ rahte.

'The people who depend on others are never glad'.

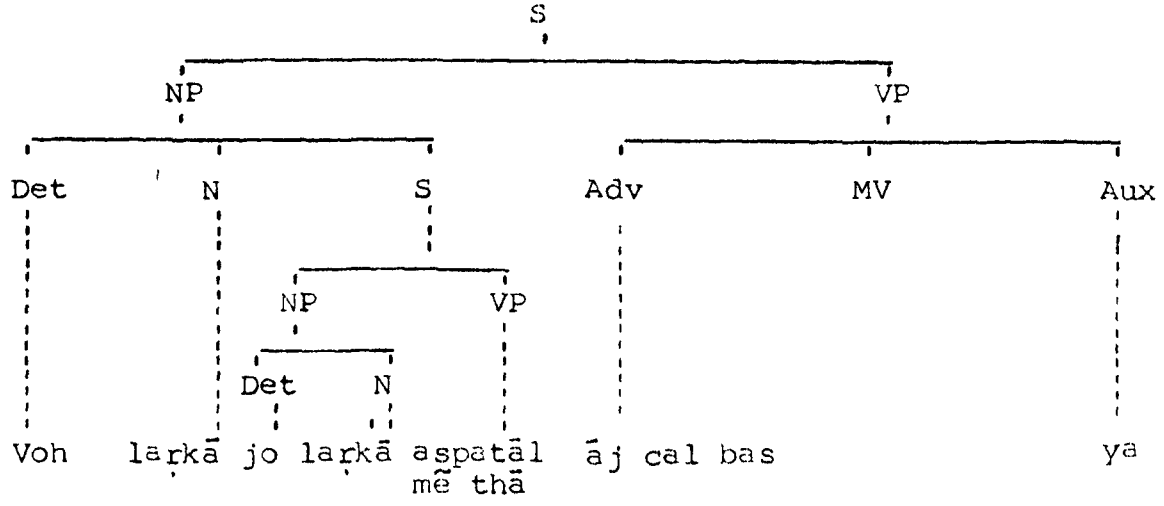
25. voh laṛka jo aspatāl mẽ thā āj cal basā.

'The boy who was in hospital expired today'.

The underlying structure of these sentences is as follows :



After Relative Transformation, Topicalization applies which moves the subject N of matrix S to the front of the embedded S. After Topicalization of subject N, the obtained structure would look like the following :



By Equi-NP deletion and relevant phonological rule, the obtained form is as (25).

Some instances of object preposing, which have not been discussed so far, are noted below :

26. maĩ ne voh sabaq yād karliyā jo āpne batāyā thā.
'I learned that lesson which you advised'.

27. voh baccā mar gayā jIsko rām ne pālā thā.
'The boy whom Ram brought up died'.

28. jIs laṛke ko maĩ ne bulāyā hai voh merā choṭā bhāi hai.
'The boy whom I called is my younger brother'

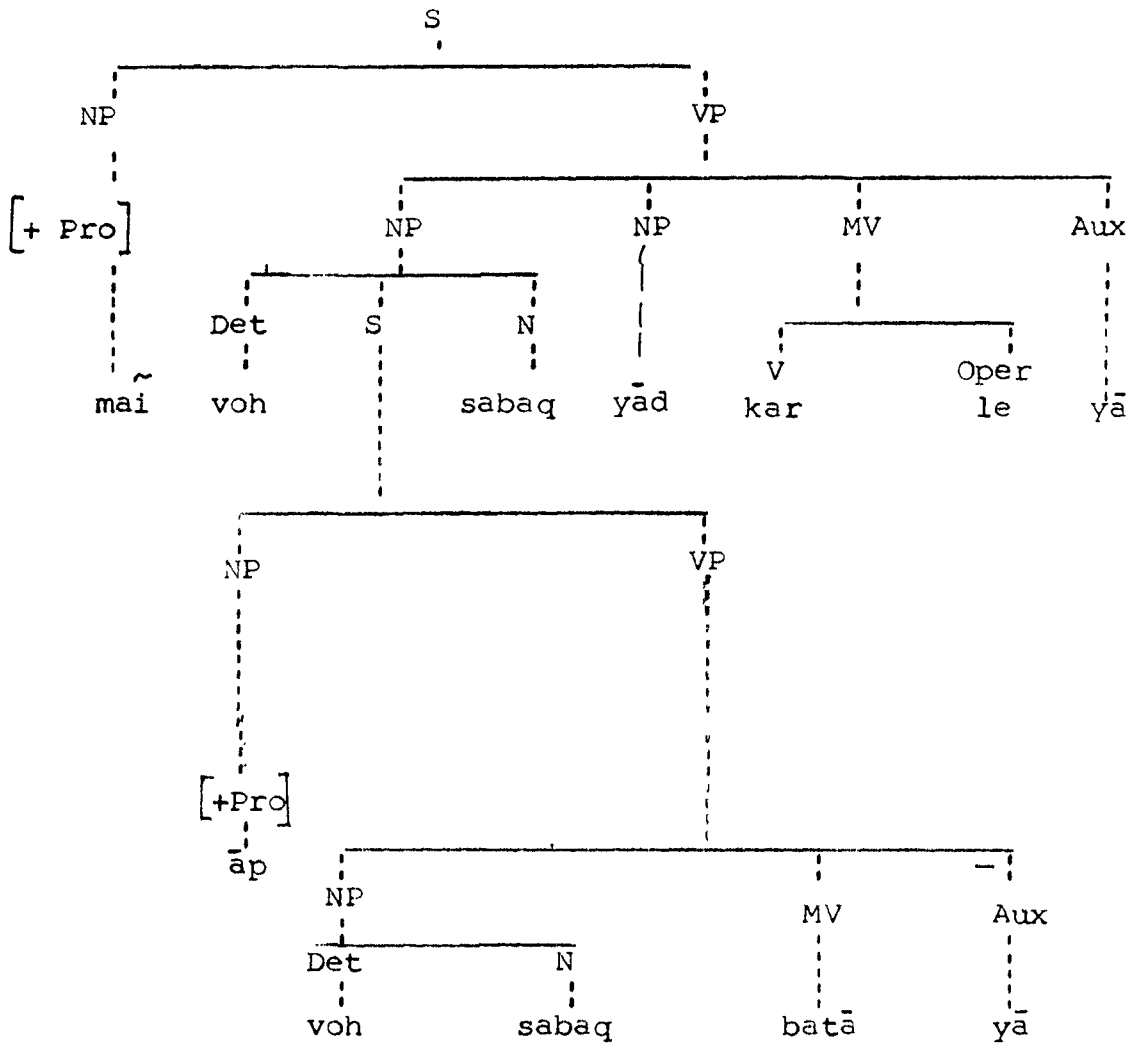
29. jo kItāb āpne bheji thi voh maĩ ne mohan ko dedi.
'The book which you sent I gave to Mohan.

30. voh kele jo ham ne kal xaride the xarāb nIkle
'The bananas which I purchased yesterday proved bad"

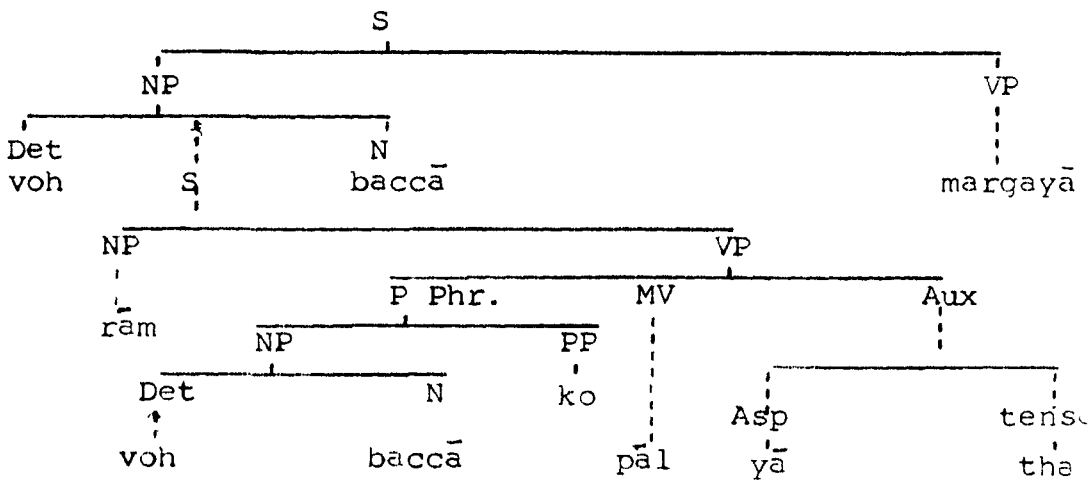
31. voh mariz jIsko ḍāktar ne davā di ṭhik hogayā.
'The patient to whom doctor gave medicine became healthy'.

The underlying tree representation of sentences 26-27 are as follows :

Sentence - 26



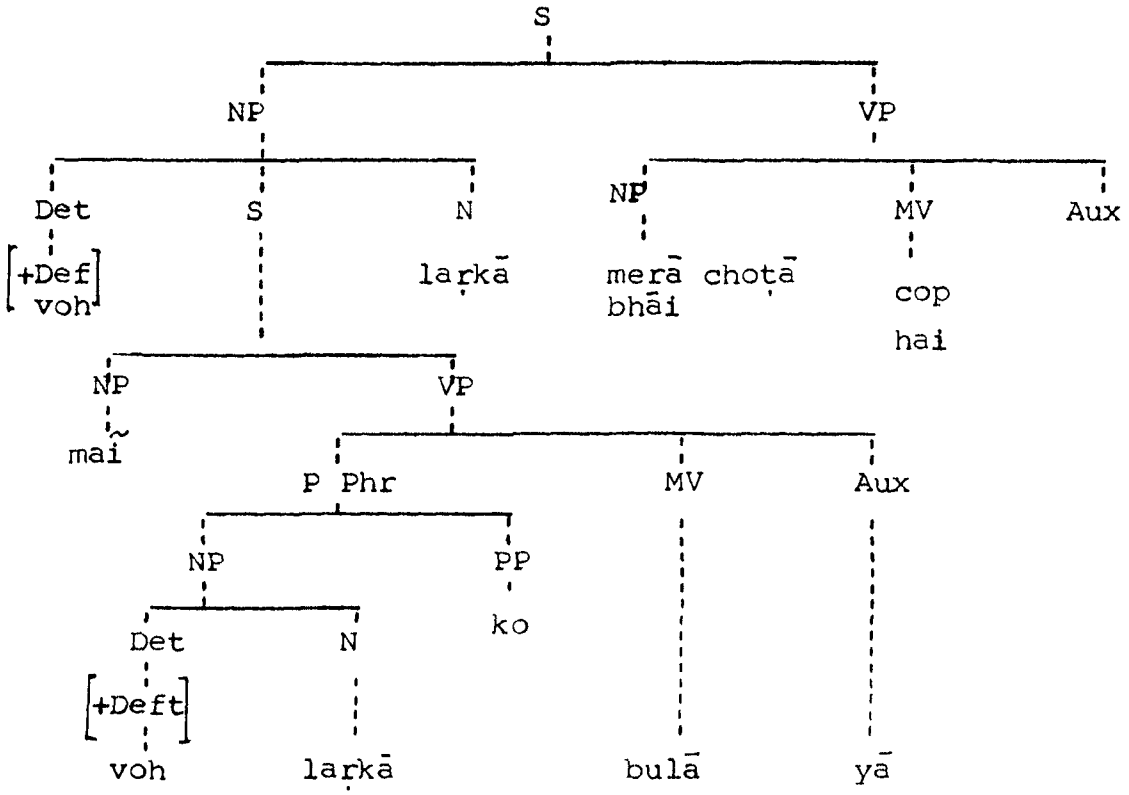
Sentence - 27



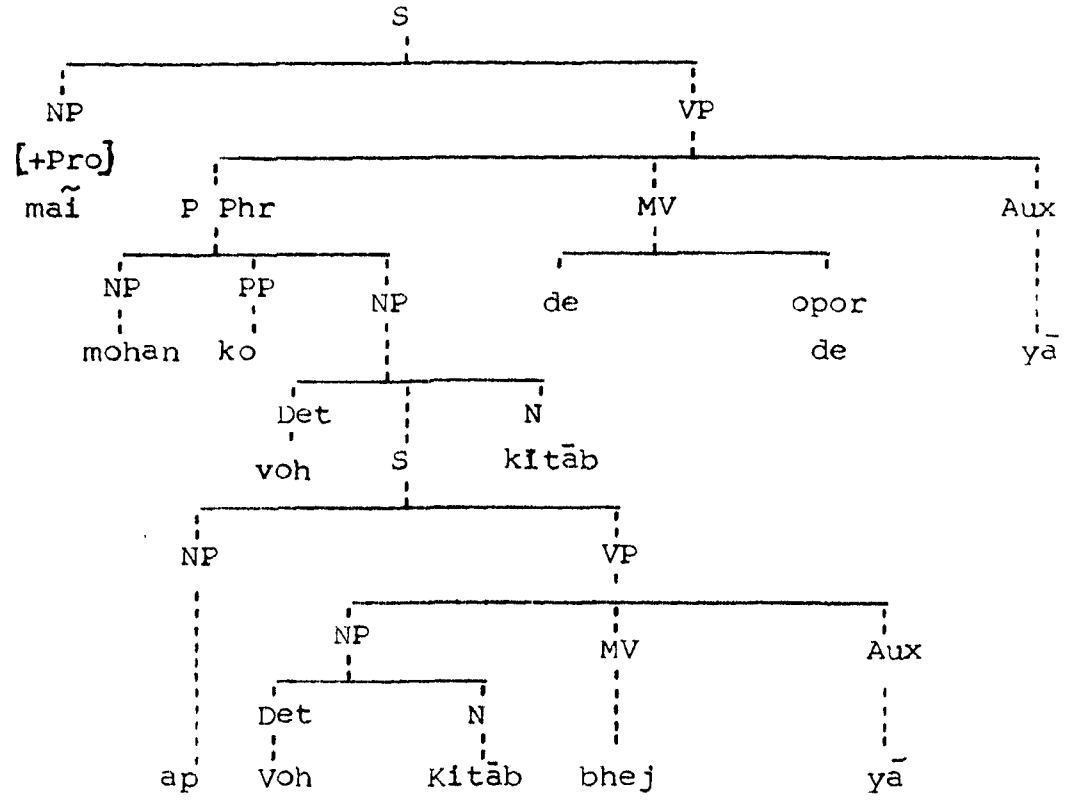
Application of the rules, Relative transformation, extraposition, object preposing (which moves the relativized object to the front of embedded S). Equi-NP Deletion and post cyclic rules, i.e. case marking rules generate the surface forms. After relevant phonological rules, the sentences that we obtain are 26 and 27.

The underlying structures for sentences 28 and 29 and T.Rules applicable to these structures are examined below :

Sentence - 28



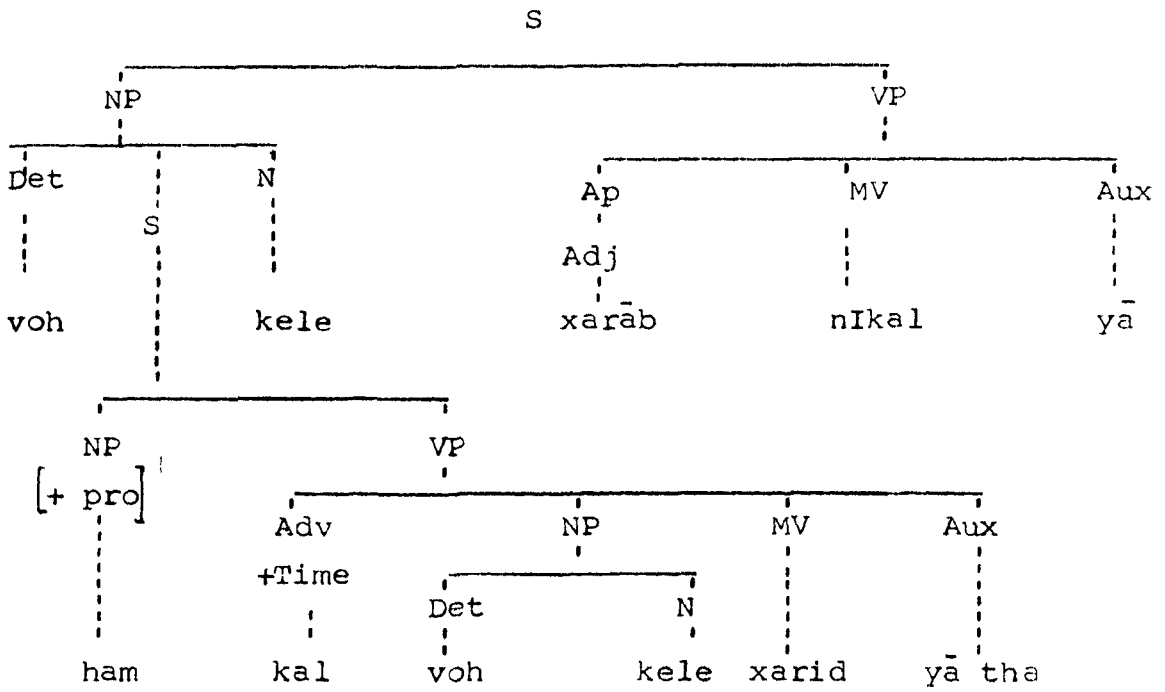
Sentence - 29



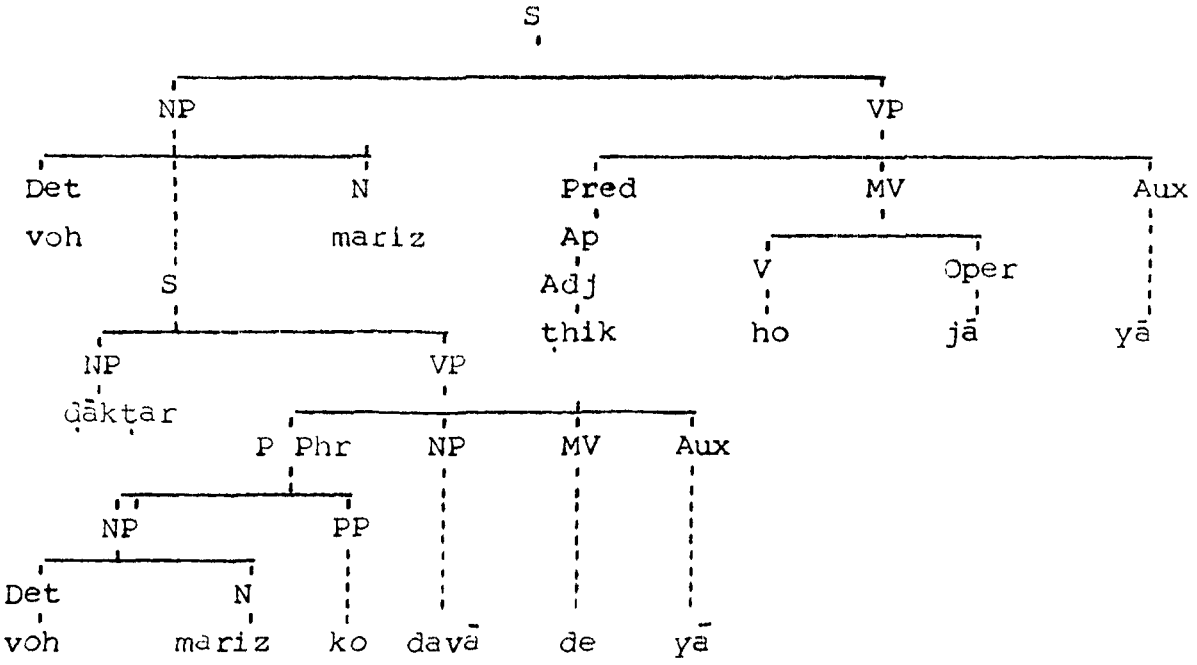
The rules that are applied to the above mentioned structures are Relative Transformation, R-clause fronting Rule, Object Preposing rule, Equi-NP deletion and case placement rules. After relevant phonological rules, the obtained structures are as 28 and 29.

The surface representation of sentences 30 and 31 is derived from underlying representation such as that given below:

Sentence - 30



Sentence - 31



Application of the rules, Relative Transformation, Topicalization of subject N, object preposing, Equi-NP deletion and case marking rule (after phonological interpretation) produce the surface forms of sentences 30 and 31.

A careful examination of above sentences reveals the fact that the greater freedom of movement of J-noun structure in R-clauses is not restricted with either S-initial relative clauses or S-final relative clauses. This, however, cannot be correct that jo-preposing rule is optional if the R-clause were S-initial and obligatory if it were S-final. We have noted the constraint in determining the position of J-noun structure in its clause what we want to state is that if jo-N structure plus an optional post position is seen to occur just before a verb, then it is moved obligatorily to the front of its clause.

For instance, consider the acceptable sentences containing R-clause sentence-finally,initially and medially and J-element is seen to occur in non-initial position of its clause.

32. Insān jIs mulk mẽ paida hotā hai voh uskā vatan kĪhlātā hai.

'The country in which a person is born is said to be his mother land'.

33. ḍāktar ne jIs mariz ko davā di vohi cal basā

'The patient passed away to whom Doctor gave medicine'.

34. rām hameshā unhī̃ logõ̃ se miltā hai jīnko maī̃ pasand nahī̃ kərta.

'Ram always meets those people whom I do not like'

35. maī̃ ne voh kītāb nahī̃ xaridi kal āpne jo batai

'I did not buy the book which you told about yesterday'

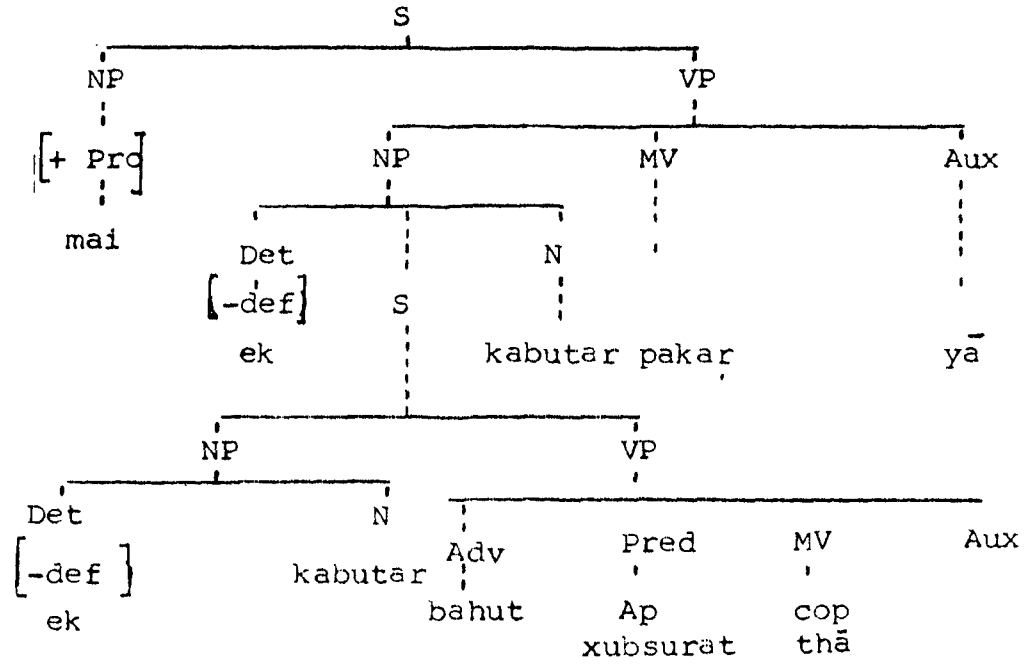
36. āpne jo kām kal batāyā thā voh maī̃ nahī̃ kar sakā.

'I could not do the work which you told yesterday'.

37. ham ne jIs naukar par bhi bharosā kiyā usi ne ham ko dhokā diyā.

38. āpne jIs kutte ki tā̃ng toṛi hai usi ne mujhe kāṭā thā.

It is noted that if the noun modified is preceded by an indefinite determiner, the relative clause obligatorily occurs sentence finally, it frequently does not elsewhere. Additionally, if, however, the relative clause, though containing an adjectival phrase, is not reduced, it is extraposed beyond the main clause, rather it precedes the modified N. For instance, the underlying structure of sentence (14) is as follows :



The application of the rules, Relative Transformation Extraposition, Equi-NP deletion and case placement rules yield the sentence such as :

mãi ne ek kabutar pakṛā jo bahut xubsurat thā.
'I caught a pigion who was very beautiful'.

Before the discussion of R-clauses is concluded, sentences which involve time and place adverbs such as jab 'when' jahã̃ 'where' etc. have to be examined to determine if they are at all related to the types of constructions discussed so far.

The sentences such as follows are to be examined in this regard :

32. mãi us vaqt pahũcā jab voh mar cukā thā.
'I reached at that time when he had died'

33. mãi vahã̃ rahtā hũ jahã̃ rām rahtā hai
'I live there where Ram lives'

34. jab mãi pahũcā voh mar cukā thā
'When I reached he had died'.

35. jahã̃ rām rahtā hai vahĩ mãi rahtā hũ
'Where Ram lives I (also) live there.

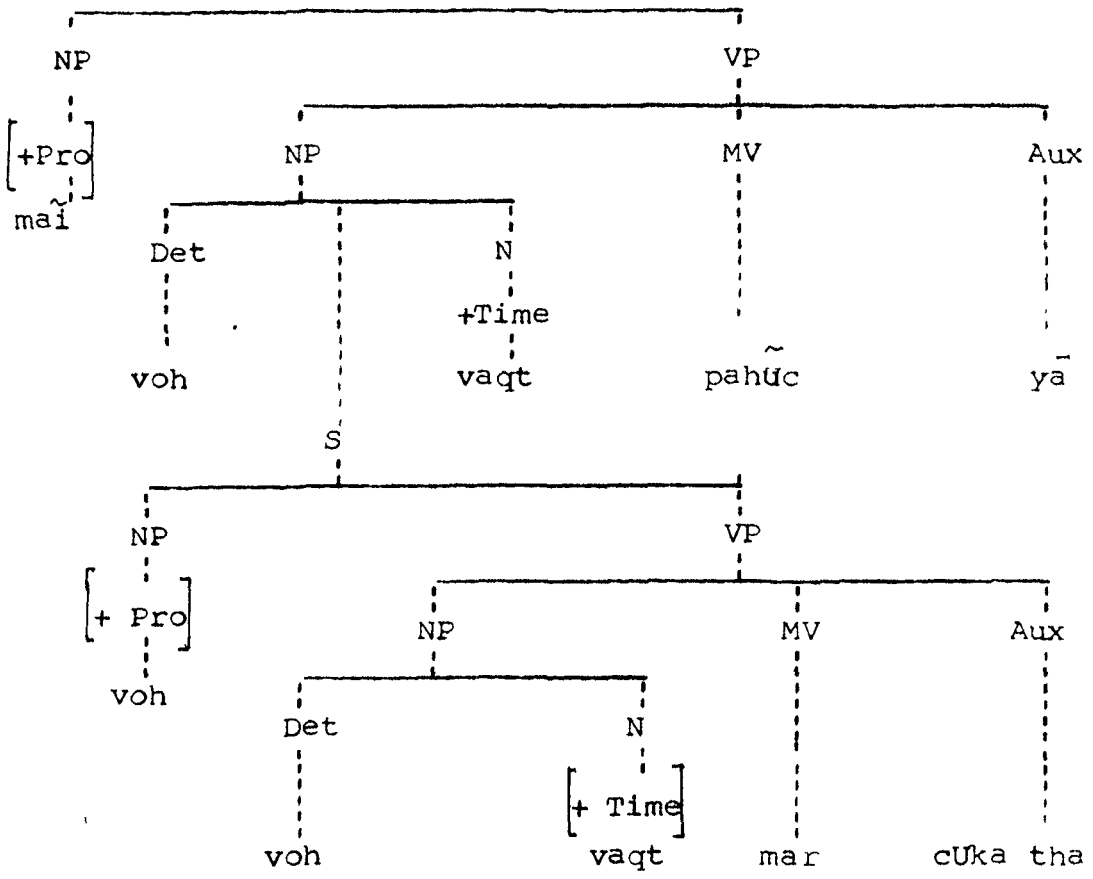
As far as the sentences such as 32-35 are concerned, a relative clause which involves either time or place adverbs such as jab, jahã̃ etc. is said to be functioning as adverbial clause. The R-clauses that are introduced by jab or jahã̃ are generated

by the same set of rules as formulated above. The sentences such as 32-33 are derived by the same Extraposition transformation that places R-clause sentence finally and 34-35 are derived by R-clause Fronting Rule (Adv. clause Fronting Rule) which moves R-clause to sentence initial position. As regards the adverbs such as jab, jahã etc. which involve in R-clauses indicating time or place expression, they are obligatorily preposed in a R-clause by a Transformational rule.

Further more, it would not be irrelevant to state that when the modified noun is in object position or a post-positional object and indicates the adverbial expression of time or place, a R-clause seems to be functioning as adverbial clause in the sentence.

The question now arises, if jab, jahã etc. are not noun phrases underlyingly, how can the grammar of Urdu/Hindi account for them. A reasonable assumption is to consider them as noun phrases that indicate time and place.

The underlying structure of sentences such as 32-35 would look like the following :



Sentences such as 32-33 are derived by Extraposition and 34-35 by Fronting Rule and the object NP is moved to the front of its clause by the later preposing rule.

It is to be noted that the words 'jab and jahā̃' in its function as a relative pronoun, are often at the front of its clauses modifying a noun which has the feature [+ time] or [+ place] accordingly.

36. mai̇̃ us vaqt pahũcā jab voh mar cũkā thā

37. mai̇̃ vahi̇̃ rahtā hu jahā̃ rām rahtā hai

'I Live there where Ram lives'

Noun phrases which dominate the referent noun in the main clause seem to be transformed optionally by what might be called the 'time-place deletion transformation'. This transformation only deletes the noun phrases of which the noun has the feature [+ time] or [+ place] :

The time place deletion thus allows the reduction of

38. jab maĩ pahũcā voh us vaqt mar cukā thā

' He died when I reached'

to the sentence below :

39. jab maĩ pahũcā voh mar cukā thā.

The correlative type of clauses indicating time, place direction, etc. retain their correlatives in some contexts :

40. jab maĩ dĩlli mẽ thā tab har sal 15 agast dekhtā thā

' I used to see the celebration of 15 August when I was in Delhi'

Relative markers in reduplicated forms such as jo jo, jab jab, jahā̃ jahā̃ etc. are used to express various distributive meaning[8]:

41. jab jab āpne yād kiyā maĩ hazĩr ho gayā

' I came every time you called me'

It is to be noticed that if, however, the modifying constituent (Adv./Noun) contains the feature of [+Time] or [+Place] in the deep structure, even with these features

it may or may not change its word class in the surface representation. In this regard, the rule of Equi-NP Deletion operates optionally, no matter the items of the sort appear in the first or second clause :

42. (i) voh tab/Us vaqt marcukā thā jab/jis vaqt maĩ vahā̃ pahũcā.

(i.a) jab/jIs vaqt maĩ vahā̃ pahũcā tab/Us vaqt voh mar cũkā thā

' He had died when I reached there'

(i.b) āp aise vaqt vahā̃ pahũca jo mũnasIb na tha

'You reached there at improper time'

43. (ii) maĩ vahā̃/Us jagah rahtā hũ jahā̃/jis jagah rām rahtā hai

(ii.a) maĩ jahā̃/jIs jagah rahtā hũ vahĩ/Usi jagah rām rahtā hai

' I live there where Ram lives'

(ii.b) maĩ Us jagah rahtā hũ jo āpne nahĩ dekhi

' You did not see the place where I live'

To sum up the entire discussion, R-clause in Urdu/Hindi involve a Relativization rule and Equi-NP deletion rule, which are obligatory, but R-clause Fronting rule, Extraposition and Topicalization are carried out obligatorily with regard to complementary distribution. Object preposing rule is in fact optional one, which is applied conditionally. The Equi-NP deletion rule is ordered after other transformational rules. But on the other hand, the relativization is followed by all

the transformational rules in Urdu/Hindi. The deletion of the shared noun always takes place in the second clause and the determiner automatically occupies the position of NP in the second clause. The determiner occuring in the first clause whether simple or relative will always act as determiner, unlike in second clause. The initial occurrence of relative clauses are not always considered best. Similarly fronting of the j-element in its clause may be preferred in most instances but not always. The referent noun in the main clause may be the subject, object, post positional object or a possessive, still it is acceptable to use a RR to begin the sentence. Similarly the RR may permit the occurrence of the share noun in different cases and constructions within them. The RR rarely occur sentence-medially, but frequently elsewhere.

A Participial modifier

Nouns are modified by clauses (i.e. RR clauses) or even by phrases. Since these phrases function syntactically like RR clauses, these are referred here as modifiers that modify a noun.

The internal structure of the complex noun phrase with a modifier is as follows : Such noun phrases may contain a clause which yields a clausal modifier-RR clause or simply a phrasal modifier i.e. participials or adjectives. The following are illustration :

44. vahã̃ maĩ̃ ne ek xubsurat jhil dekhi

'There I saw a beautiful lake'.

45. voh calti gāṛi se khūd paṛā

'He jumped down the moving vehicle.

46. vahã̃ jo log baiṭhe haĩ̃ maĩ̃ unko nahĩ̃ jāntā

' I do not know the people who are sitting there'.

In sentence-44, the NP has a numeral and an adjectival modifier, in 45, it contains a participial as modifier and in 46, a full RR clause, as modifier.

According to Lakoff (1970), modifiers in English are adjectives, participials, possessive nouns and pronouns and reflexive pronouns[9]. In the present study the analysis of the participials and predicative adjectives derived as modifiers will be accounted.

The noun modifiers in Urdu/Hindi, are derived from underlying full sentences, that make an assertion about the noun being modified. Noun phrases functioning as subject, direct or indirect object, or object of post position are all modifiable and these modifiers restrict the reference of the antecedent or head noun as RR clauses do. The following exemplify the above :

47. āp kā likhā huā xat abhi tak nahi āyā.

'The letter written by you did not come up-to-now.

48. Usne rote hue bacce ko tofi di.

'He gave toffee to the child who was weeping'.

49. lilā sare hue ām nahĩ khati.

'Lila does not eat mangoes which are rotten'.

50. voh tute hue palang par baitha thā

'He was sitting on the broken cot.

In sentence 47, modified NP is subject xat 'letter'; in 48, indirect object bacca 'child' in 49, direct object 'am 'mango' and in 50 post positional object palang 'cot'.

In Urdu/Hindi, participial constructions which are used attributively to modify a noun, are sub classified into various categories, both on formal and semantic grounds. In terms of form, these have been set up as imperfect, perfect and agentive[10]. These are expressed by the following forms (all forms are third person singular masculine) :

a)	Imperfect	rota hua	'weeping'
b)	Perfect	phata hua	' torn'
c)	Agentive	jane vala	'who used to go'

The imperfect and perfect participials are formed by attaching the perfect form hua, of the hona 'to be' to the imperfect and perfect stem of the verb. The form hua is optional in most cases. The agentive participial, which has recently been proposed by Kachru (1980:35), is formed by attaching vala to the

inflected infinitive of the verb. The following underlined participial constructions illustrate the three types :

51. Usne Urti hui ciṛyā ko pakṛā

'He caught a bird who was flying'

52. Ustad ne kIlas mẽ baiṭhe hue baccõ ko ṭofiyã dĩ.

'The teacher gave toffees to the children who were sitting in the class'

53. rāmu shām ko jāne vāli gāṛi se jāegā

'Ramu will go by the evening train'.

The present participle indicates on going action or process, and the agentive, habitual or potential action or process (Kachru 1980:35).[11] Participials such as in 51-53, are instances of the above.

There are, however, cases where participle modifiers are used predicatively also, e.g.,

54. yeh xutut rām ke lIkhe hue haĩ

' These letters were written by Ram.

55. Uski shakl roti hui si hai

'His face is felt to be weeping.

56. ramā Is same jāgti hui hogi

'Rama will be waking up at this time'

If used predicatively, the agentive participle may express meaning similar to future tense (Kachru 1980:73).

57. rāj kalkatte jāne vālā hai.

'Raj is about to go to Calcutta'.

The participial modifiers derived from dative subject verbs can not occur attributively, although some of the past participial forms occur predicatively:

58.* mā̃ yād āte hue baccā ro paṛā.

'Remembering mother, the child wept bitterly'.

59.* bhuk lagā huā baccā ro rahā hai.

'Having felt hunger, the child is weeping.

60. bacce ko bhuk lagi hui hai

'The child is hungry'.

61. sher ko goli lagi hui hai

'The lion is wounded by bullet'.

62. mujh ko āj bahut xushi hui hai

'I am very happy today.

In a limited contexts, they yield perfect participles which modify noun identical to the complement of the participial;

63. goli lage hIran ko shIkāri ne āsāni se pakaṛ lIyā

'The hunter easily caught the deer who was hit by the bullet'

64. rām ko āyā huā ɣUssā baṛi mushkIl se Utartā hai

65. Uske lagi hui choṭ bahut halki hai.

There are, however, cases where the agentive participial expresses either potential action or action in progress rather than habitual action (Kachru 1980:73)

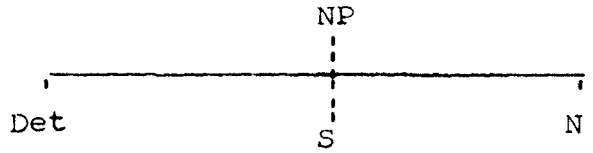
66. Imtahān mẽ avval āne vālõ ko Inām diye jāẽge

'Those who secure a first class in the examination will be given prizes'.

67. Is kamre mẽ paṛhne vālõ ko tang mat karna.

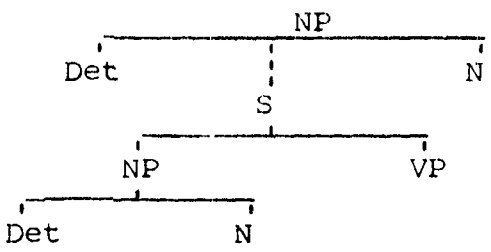
'Do not disturb those who are studying in this room'.

The following is an underlying structure of a participial adjectival phrase, in case it is used attributively to modify a noun identical and coreferential with the subject or with the object of the participial:



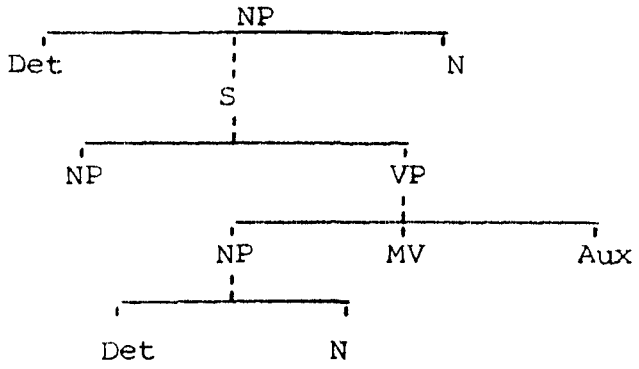
The subject of the participial and noun being modified would share the common feature, if the underlying tree representation is as follows :

(A)



The object of the participial and a noun to be modified would be identical and coreferential, if, however, the underlying tree representation is as below :

(3)



It is clear from the above structures, noun modifiers require that either subject or object of the embedded S be identical to and coreferential with the noun of the NP which contains an S.

In terms of use, participial modifier behave in restricted manner to modify a noun identical to and coreferential with the subject or object of the participial. This may be illustrated in the following.

In general, most imperfect and perfect participles derived from intransitive verbs modify a noun identical and coreferential with their subject:

68. Us ne soti hui laṛki ko jagā diyā

69. rāmu ne ṭuṭā huā gIlās paĩk diyā
'Ramu threw out the broken glass'.

Most imperfect and only a few perfect participles derived from transitive verbs work in this manner also:

70. shIkāri ne pāni pite hue sher par goli calāi

'The hunter opened the fire to the tiger who was drinking water'.

71. angrezi paṛhe hue log kheti nahĩ karte

'The people who knows English do not do cultivation'.

Most perfect participles obtained from transitive verbs modify a noun identical to and coreferential with their direct object. The subject of participle then is marked with the genitive post position ka '<u>of</u>'

72. Usko lilā ke bheje hue kapṛe bahut pasand āe.

'He liked the clothes sent by Lila'.

73. yeh meri paṛhi hui novIl hai

'This ia a novel which I have read'.

For discussion of participial adjectival phrases, see, Kachru (1968) and Kachru (1980).

It can be argued that transitive verbs do not undergo the transformation to yield imperfect participials which modify a noun identical to and coreferential with the object of the participles:

74.* maĩ ne rām kā likhta hua xat paṛhā

'I read a letter which is being written by Ram'.

Only a few transitive verbs such as lenā 'take' uṭhānā 'lift up', sikh nā 'learn',oṛhnā 'cover oneself' ,pahannā 'wear', laganā 'apply'
that denote changed state of subject or have a more lasting effect in their perfective aspect yield perfect participles that modify nouns identical to and coreferential with their subjects. Consider the examples.

75. maĩ ne burqa oṛhe hue laṛki ko bāzār jāte dekhā
'I saw a girl, covered by burqa going to market.

76. hār liye hue māli darvāze par khaṛā thā
'Flower man with garlends was standing on the door'.

Intransitive verbs such as kudnā 'jump up and down' uchalna 'jump' nācna 'dance' cillāna 'shout' dahāṛ na 'roar' etc. that denote momentary action or accidential events do not undergo the transformation to result in perfect participial adjectival phrases.

77. Uchlā huā maiḍak ' Having jumped frog'
78. nāci hui laṛki ' Having danced girl'
79. dahāṛā huā sher ' Having roared lion'

Intransitive verbs such as dhaknā 'cover' khulnā 'open' phaṭnā 'tear' ṭuṭnā 'break' khonā 'lost' that express the meaning similar to completed action do not yield imperfect participles :

80. ḍhaktā huā dudh.

81. phaṭṭe hue kapṛe.

82. khotā huā laṛkā.

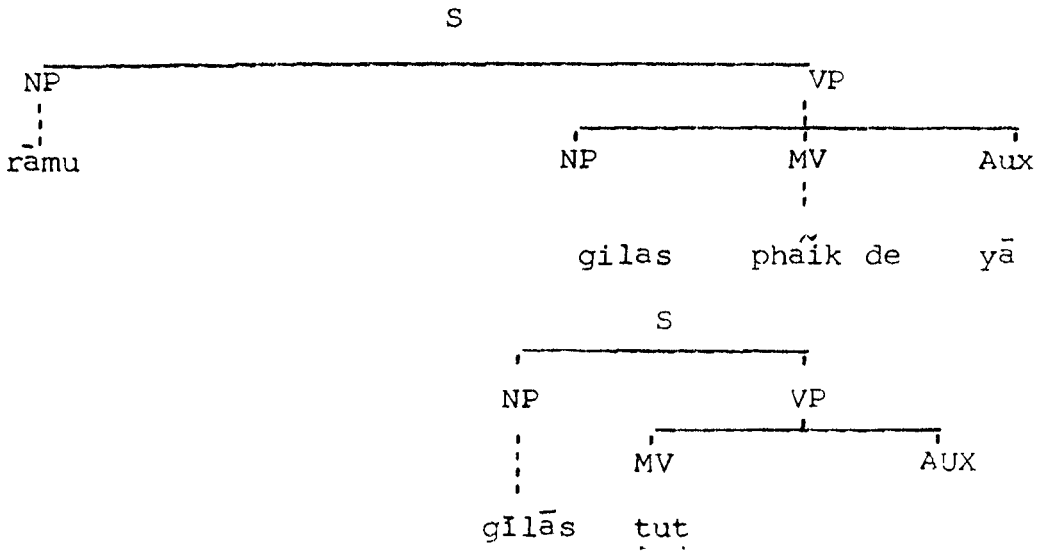
The adjectivization transformation which yields participial as modifier performs the following operations :

a) It deletes the AUX of the embedded S

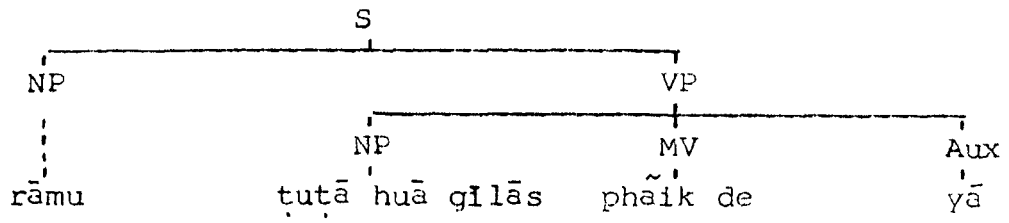
b) attaches the participial marker such as tā hua/yā hua/ nevala to the MV of the embedded S.

c) it deletes the subject or object of the embedded S.

The underlying structure of sentences, such as 68-71 is as follows :



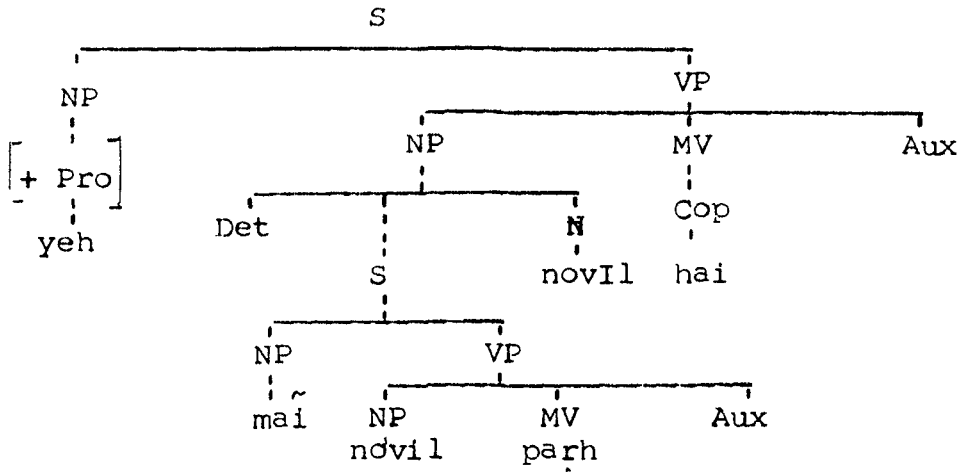
The adjectivization transformation applies to the above structure and yields the following form (after tree pruning):



In case of 70, the rule applies (Shīkāri-(Sher pāni pitā hai) Sher par goli calāi) and transforms it to shīkari pāni pitā hue sher par goli calāi.

The process involved in deriving the participial which modify nouns identical and coreferential with the direct object of the participials is as under :

The sentences such as 72-73 have the following underlying structure such as :



By Adjectivization transformation, the yielded structure results in a well-formed past participle such as yeh (meri parhi hui) novil hai

The obvious difference between the participles used in 68-71 and 72-73 is that they modify nouns identical to and coreferential with their subject in 68-71 and 72-73, they modify nouns which share the features of the direct object of the participles.

In terms of internal structure, both participle clause and RR clause seem to appear identically but they are distinct superficially. RR-clauses are used in a fluctuating order in the sentence with respect to the main clauses, participles are not. This is illustrated from the following :

83. vahā̃ jo log baiṭhe haĩ unko maĩ nahĩ jāntā
'I do not know the people who are sitting there'

84. maĩ un logõ ko nahĩ jāntā jo vahā̃ baiṭhe haĩ
'I do not know the people who are sitting there'.

85. maĩ vahā̃ baiṭhe hue logõ ko nahĩ jāntā
'I do not know the people sitting there'.

86. maĩ Un logõ ko nahĩ jāntā vahā̃ baiṭhe hue
'I do not know the people sitting there.'

It is obvious that sentence 86 is ungrammatical. Since participles do not behave like clauses, a reflexive pronominal form that refers to the main clause subject may occur in them, rather than with a full clause (Kachru-1980:142):

87. rāj ko apni bahan ki lāi hui cizẽ pasand āĩ
'Raj like the things that his sister brought'

88. rāj ko voh cizẽ pasand āĩ jo Uski bahan lāi
'Raj liked the things that his sister brought'.

It is to be noted that the internal structure of 87 is 88 in which the main clause subject rāj controls the reflexive form apni in 87:

89. rāj ko (rāj ki bahan ki lāi hui) cizẽ pasand āĩ.
'Raj Dat. Raj of sister of brought things liking came'.

Instrumental adverbial, like temporal and locational, is marked with the genitive postposition ka, in case it is used within the participles. The participles derived from independent sentences are illustrated below[12]:

90. yeh shāl kashmir mẽ bane
'These shawls are made in Kashmir'.

91. sitā ne kashmir ke bane hue shāl xaride
'Sita bought shawls made in Kashmir'.

92. yeh khānā rāt banā thā
'This food cooked at night.

93. rām rāt kā banā huā khānā subah mẽ nahĩ khātā
'Ram does not take meal in the morning that cooked at night'.

94. yeh makān patthar se banā hai
'This house is made of stones'.

95. latā patthar ke bane hue makān mẽ rahti hai
'Lata lives in a house made of stones'.

There are, however, cases where participial form of the verb is dropped, e.g. :

96. Usne kashmir ke shāl xaride
'She bought shawls made in Kashmir'.

97. latā patthar ke makān mẽ rahti hai
'Lata lives in a house made of stones.

It is noted that the locational adverbial such as in 96, can be transformed to adjective such as in 98, and this then modifies the noun shāl which shares the features of the subject of the embedded S. This is clear from the following :

98. sitā ne kashmiri shāl xaridi
'Sita bought Kashmiri Shawls'.

It is noted that if agentive participle preceded by temporal adverbial is dropped, the temporal adverbial appears with the inflected form of either genitive ka or vala and this then modifies the noun gāṛi 'train' which is the object of se 'by' :

99. voh shām ko jāne vāli gāṛi se jāegā
'He will go by the train, going in the evening.

100. voh shām ki gāṛi se jāegā
'He will go by the train in the evening!

101. voh shām vāli gāṛi se jāegā
'He will go by the evening train'.

Agentive participle, unlike imperfect and perfect participles, drops a noun to which it modifies. It may express completed action, too, depending upon the context :

102. jang mẽ marne valo ko Inām dIye gae

'Those who died in the battle were given prizes'.

It is to be noted that the agentive participles are used parallel to perfect participles which modify a noun identical and coreferential with their subject or with their object:

103. hamẽ ek angrezi jānne vāle naukar ki talāsh hai

'We are looking for a servant who knows English'.

104. rāmu ka sardi mẽ pIhanne vālā koṭ phaṭ gayā

'The coat which Ramu uses in winter season torn out'.

Infinitival phrases are also used attributively to modify a noun, similar to participial modifier:

105. latā ke sone kā kamrā gIr gayā

'The room in which Lata sleeps collapsed'.

Balachandran (1937) in support of her claim that casuative sentences are simplex one, states that the verbs in Hindi which can have the case frame A + O may yield participially modified noun phrases. This is exemplified in the following[13]:

106. maĩ kavItā lIkhtā hũ 'I write poem'

106(a) meri lIkhi hui kavItā 'The poem that I wrote'.

According to her such constructions are also possible when the verbs are causatives such as :

107. maĩ per kāṭ tā hũ ' I cut the tree (kat is causative of kat)

107(a) merā kāṭā huā per ' The tree that I cut'

She further suggests that if surface object of causative verb is an agent or experiencer in the embedded sentence, this transformation can not be applied:

108.	maĩ ne laṛke ko dauṛāyā	'I caused the boy to run'
108(a)	mere dauṛāyā huā laṛkā	'The boy whom I caused to run'
109.	maĩ ne laṛki ko ghabrāyā	'I caused the girls to be nervous'.
109(a)	meri ghabrāi hui laṛki	'The girl whom I caused to be nervous'.

This does not seem to be satisfactory that 108(a) and 109(a) are ungrammatical only because of the deep structure case (agent) of laṛkā/laṛki. It is obvious that the verbs such as in 61, denoting momentary action do not yield past participial modifier. However, this verb resulted in a past participle in the following context, cannot be said to be ungrammatical in Urdu:

110. mera dauṛāyā huā ghoṛā res mẽ avval āyā

'The horse that I caused to run came first in the race'.

On the other hand, an examination of 109 and 109(a) makes it clear that Balachandran failed to notice that the verb ghabrānā 'to be nervous' is an intransitive of the type which can not be converted into causative to have a well-formed case frame A + O

and which does not yield past participle.

There are also cases where the surface structure object is an agent of the embedded sentences like the following :

111. naukar ghar se nIklā 'The servant left house'

111(a) Usne naukar ko ghar se nIkālā 'He caused the servant to *leave the house*'.

111(b) Us kā ghar se nIkālā huā naukar 'The servant whom he caused to leave the house'.

112. bacca ḍarā ' 'The child became nervous'

112(a) Us ne bacce ko ḍarāyā 'He caused the child to be nervous'

112(b) Uskā ḍarāyā huā baccā 'The child whom he caused to be nervous'.

113. bacce paṛhe 'The children read'

113(a) maĩ ne baccõ ko paṛhāyā 'I caused the children to read'.

113(b) mere paṛhāe hue bacce 'The children whom I caused to read'.

The above mentioned examples do not support the view of Balachandran that the deep structure case (agent) of nouns is responsible for the ungrammaticality of such constructions.

Mrs. Kachru (1965) and 1966) failed to mention this in her analysis of the adjectival phrases in Hindi that there are some cases where past participle modifier can modify an animate noun. She (1971) further proposes that the adjectivization rule of Hindi is constrained in such a way that transitive verbs with

animate objects do not yield past participial modifiers that modify the animate object[14].

In support of her claim, she provides the examples such as the following :

114.	maĩ ne larke ko pukārā	'I called the boy'
* 114(a)	mere pukārā huā larkā	'The boy whom I called'.
115.	maĩ ne kutte ko sahlāyā	'I patted the dog'.
* 115(a)	merā sahlāyā huā kutta	'The dog that I patted'.
116.	pUlIs ne cor ko pakṛā	'The police arrested the thief'.
* 116(a)	pUlIs kā pakṛā huā cor	'The thief who was arrested by police'.

Prof. Kachru stated that the verbs used above are inherently transitive, hence, the deep structure case of the modified nouns are not responsible for the ungrammaticality of 114(a)-116(b). This is only because of the use of animate object. According to Balachandran verbs used in 114-116 have the case frame A + O, hence, the object nouns are marked Dative. It is obvious that the example provided by her such as 68 is not acceptable by Urdu speakers.

The transitive verbs with animate objects that transformationally yield past participial modifiers are noted in the following examples:

117.	mere bulāe hue qavvāl	'The singers whom I invited'
118.	Uskā satāyā huā naukar	'The servant whom he teased'.

119. S̃ap ki kāṭi hui laṛki 'The girl who was bitten by snake'.

120. meri pakṛi hui cIṛyā 'The bird that was caught by me'.

Mrs. Kachru (1980:82) holds the view that if, however, the direct object of the verb is a human noun, this process does not result in a well-formed past participial[15], such as the following:

121 ram kā pUkārā huā laṛkā andar āyā
'The boy called by Ram came in'.

122. manju kā piṭā huā baccā ro rahā hai
'The child hit by Manju is weeping'.

123. Us ki sarāhi hui laṛki xush ho gai
'The girl admired by him became happy'.

This statement is not justifiable that all the verbs with human object do not yield past participials which modify a noun identical and coreferential with their direct objects. Depending upon the context, some verbs of the type may yield such constructions which modify a human noun identical to and coreferential with their direct object. Consider the instances such as the following :

124. nānā nāni ke pāle hue bacce aksar bIgaṛ jāte hai̊
'The children brought up by grand parents become careless'

125. vahā̃ hamāre kai jāne pahcāne log hai̊
'There are several persons who are well known to me'.

126. rām merā dekhā bhālā laṛkā hai
'Ram is a boy whom I know very well'.

127. maĩ ne āpke bheje hue laṛke ko naukri dedi.
'I have given the job to the boy who was sent by you'.

To sum up the discussion held so far, transitive verbs with animate object may and may not yield past participials, depending upon the context. There are, however, some verbs of the type which do not yield such constructions.

In the foregoing discussion an attempt is made to show that all the NPs containing the structure modifier +N are instances of noun modification and how grammar generates new NPs if they are treated as such.

Adjectives in Urdu/Hindi are used both predicatively and attributively:

128. yeh jhil sundar hai 'This lake is beautiful'
129. vahā̃ ek sundar jhil hai 'A beautiful lake is over there'.

Most adjectives occur predicatively. However, not all the adjectives occur attributively :

130. baccā taiyār hai 'The children are ready'
131. taiyār baccõ ko bulāo 'Call the ready children'

If, however, these adjectives are with their complements, they can occur attributively (Kachru 1980:68).[16]

132. bāhar jāne ko taiyār baccõ ko bulāo
'Call the children who are ready to go out'.

It is obvious that the difference between predicative adjectives and attributive adjectives lies in their function and derivation. Adjectives used predicatively perform the function as complement of the subject. If used attributively, adjectives are said to function as modifier. The predicative adjectives are derived by the highly simplified Base rules and attributive adjectives are obtained by transformations.

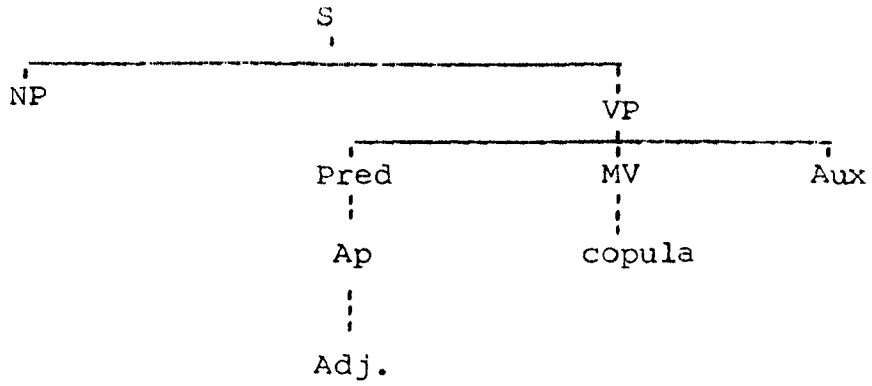
Most predicative adjectives yield attributive adjectives which modify a noun identical to and coreferential with their subject. The process of adjectival modifier is is illustrated below:

133. (a) rām ne ek ghoṛā xaridā 'Ram bought a horse'.
(b) ghoṛā bahut acchā hai 'The horse is very good'.
(c) rām ne ek [bahut acchā] ghoṛā xaridā
'Ram bought a very good horse'.

sentence (b) can be transformed to yield the phrase in square bracket in (c) and this derived phrase then modifies the noun ghoṛā 'horse' which is identical and coreferential with the subject of copula hai 'is'.

The underlying structure of such sentences that contain copula as MV are the source for all NPs which can have the

structure of the form modifier +N. That is, all such phrases of the form modifier +N are generated by the sentences of the type[17]:

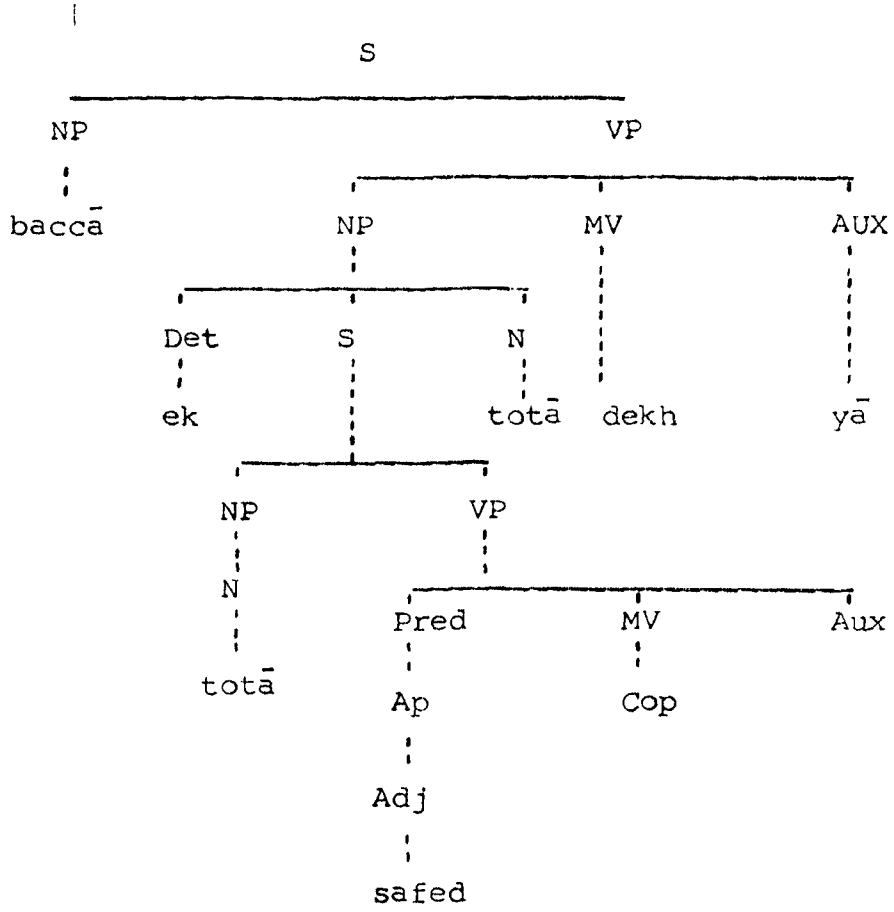


Other instances of adjectival modifier are provided by the sentences such as the following :

134.	baccõ ne ek safed totā dekhā	'The children saw a white parrot'.
135.	latā ne ek kāli bIlli pāli hai	'Lata brought up a black cat'
136.	pile āṁ miṭhe hote haĩ	'Yellow mangoes are sweet'
137.	Usne ek xubsurat cIṛyā pakṛi	'He caught a beautiful bird'
138.	vahā̃ ek moṭā ādmi rahtā hai	'There lives a fat man'

The rules applied to generate the sentences with adjectival modifier are accounted below.

The underlying tree representation of sentences such as (134) are as follows :



The rule of Relativization and Relative Reduction are made to operate on the structure such as above and transform this to sentence (137). The relativization rule applies and yields the structure jo totā safed hai - tota . Further Relative Reduction reduces the relative clause i.e. transforms the above to safed totā and finally the sentence such as (87) is obtained. The deep and surface structure given above illustrate the process of noun modification and generate attributive adjectives of the type discussed above.

The attributive adjectives are usually parallel to the

participial modifier in that they function as modifier. Even the underlying structure of adjectival modifier is embedded directly under the immediate domination a noun phrase similar to the participial modifier.

The attributive adjectives ending in-a, similar to the participial modifier, agree in gender and number with the noun they modifying. Adjectives ending on consonent are indeclinable. Predicative adjectives are inflected for gender and number features of their subject. If needed, agreement features are introduced by transformational rules.

Reduplicated adjectives either have an intensive meaning or a distributive meaning: e.g., hare hare per 'green trees', bare bare makān 'big houses'. The affix sā or si added to the color adjectives signals diminished quality, e.g., lāl-si-sāri 'redish saree'. Added to other adjectives, it signals intensive meaning, e.g., barā-sā makān 'very big house', cauri-si sarak 'very wide road' (Kachru 1980:76).

Even the predicative adverbials can undergo transformation to yield adverbial modifier i.e. attributive adverbs. Insuch a process, adverbials are marked with genitive post position kā or participle vālā. Consider the examples, which were not discussed by Kachru (1980), such as the following:

139. voh dIhli ki sabhā mẽ gayā '

140. rām somvār ki pārti mẽ maujud thā 'He was present in the party held on Monday'

141. mez vāli kItāb bahut mahãgi hai 'The book which is on the table is expensive'.

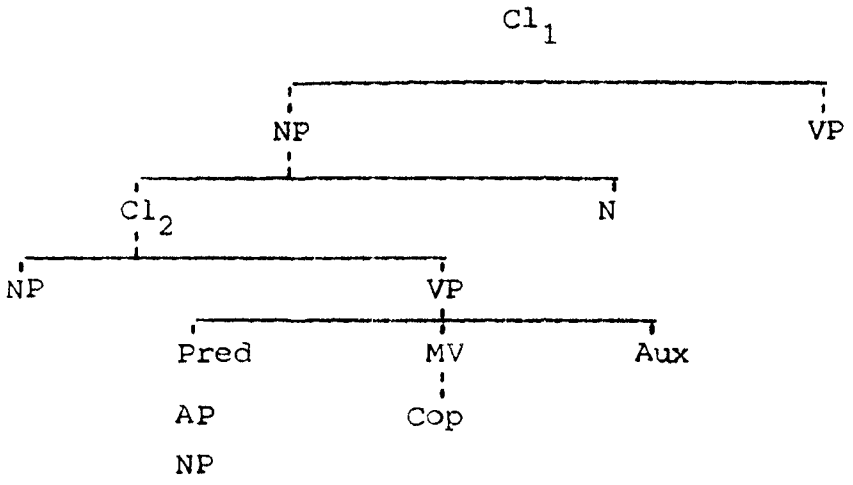
142. Us kamre vālā larkā bimār hai

143. meri dIlli vāli caci āi hai.

Noun in Apposition

A clause embedded in apposition to the noun of NP of matrix clause, undergoes the transformation and yields a noun in apposition, i.e. appositive phrase.

The underlying clause embedded in the NP if contains copula as MV, preceded by either adjective phrase or NP comes to the surface as adjective phrase or noun in apposition. The underlying structure of such sentences is as



If the embedded clause contains the MV copula preceded by an adjective, every thing is deleted from embedded clause except the adjective by Relative Reduction rule and an adjectival

phrase is yielded (that has already been discussed earlier). If the embedded modifying clause contains the MV copula preceded by a NP, we can generate an appositive i.e. the noun in apposition by deleting subject NP, copula and tense via Relative Reduction Rule. For example, from the underlying sentences :

(a) abid ali bimar hai ' Abid Ali is unwell'

(b) abid ali maulana hai ' Abid Ali is maulana'.

Someone can reduce the modifying clause to an appositive

144. Maulana abid ali bimar hai
'Maulana Abid Ali is ill.

Appositives are usually said to function as non restrictive modifiers[18].

The sentences which involve a noun in apposition are :

145. profaisar xān landan cale gae
'Professor Khan went to London'.

146. pandit rām lāl mantri hogaye
'Pandit Ram Lal became a minister'.

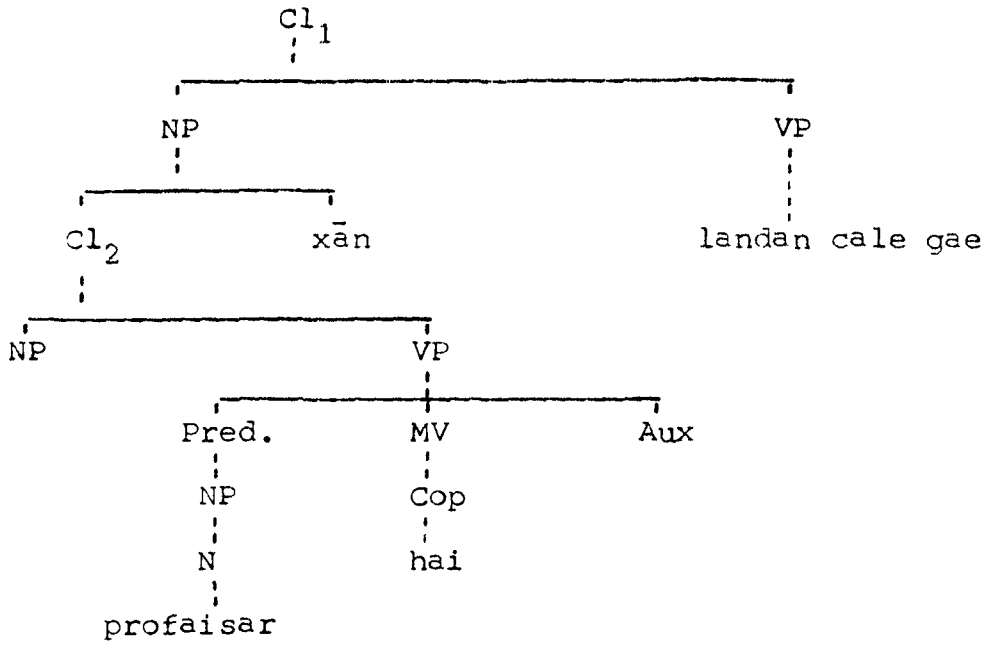
147. mIstar xān, vāis cānslor jāmia tasrif lāe hai
Mr. Khan, V.C. Jamia has come.

148. rām sarup dhobi kapre dho rahā hai
'Ram Saroop washerman is washing clothes'

The transformations that generate a noun in apposition

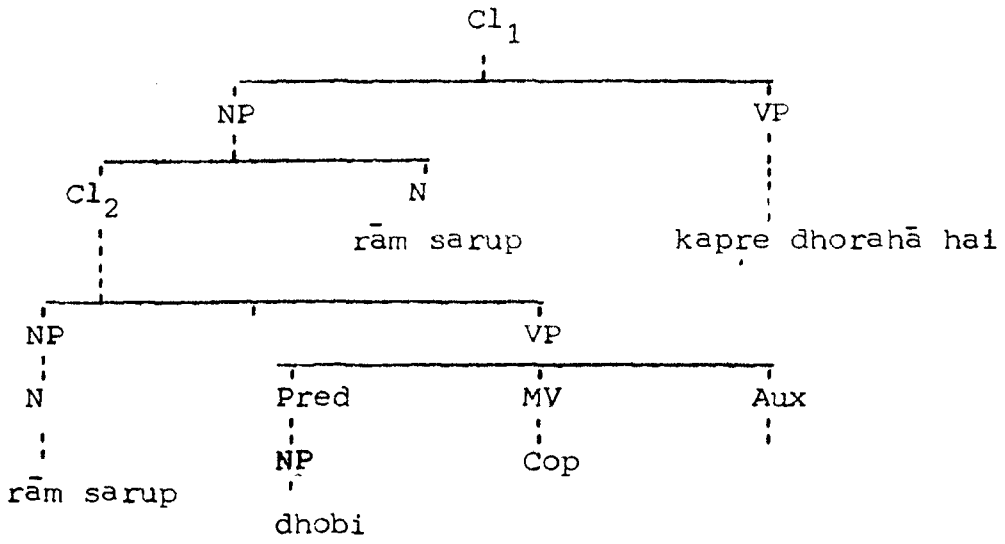
are Relativization and Relative Reduction. In the following it has been discussed how these rules are applied to generate such constructions.

The underlying representation of sentence (145) is as :

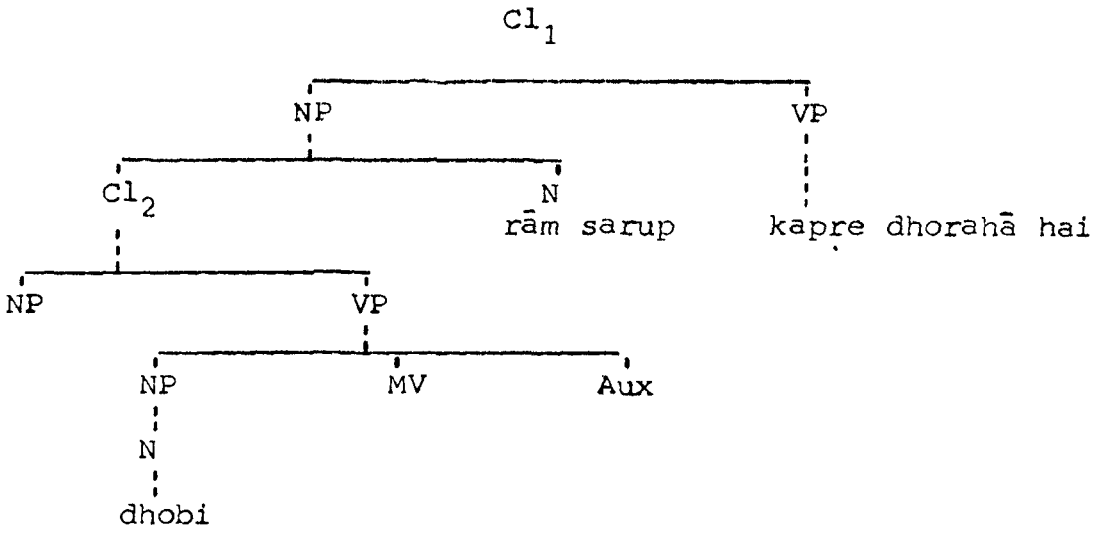


By Relativization on Cl_2 cycle, the subject NP is relativized yielding 'jo xan' and by Relative Reduction Transformation,the relativized subject NP, copula and tense are deleted from embedded clause and the modifying noun phrase profaisar in the second clause is called an appositive, i.e. appositive phrase. After Relative Reduction and tree pruning conventions the obtained structure is such as (145).

The deep structure of sentences (147-148) is like the following:



After Relativisation and Relative Reduction the obtained structure is as :



We now need a new rule (i.e. called Topicalization of NP of the higher clause) to switch the order of appositive and subject NP of higher clause. Topicalization applies to move the subject NP of matrix clause to the initial position of the embedded S, to produce the proper surface form of sentence (148).

We may conclude then that the derived appositive phrase is one of the instances of noun modification to be conditioned by NP-modification rule. In the above mentioned examples, it has been noted that the modifiers in surface structures are seen either to precede or follow the modified nouns. The derivational conditions are not satisfactorily met, if the subject of the appositive phrase is not identical to and coreferential with the subject of finite verb.

Possessive Phrases

All the instances of noun modification in Urdu/Hindi, depend upon the condition of coreferentiality of two nouns that occur in two different clauses. All the modifying constructions contain the structure of either Post-NP modifiers (modifier +N) or of Pre-NP modifier (N + modifier). The adjectives, participials and possessive phrases contain the form of post-noun phrasal modifiers. The distinguishing characteristic of noun in apposition and the relative clause is that they permit both the possibilities in their forms.

In the possessive phrases, possesser N + Kā is said to be functioning as modifier that modifies / (the) subject as well as object N. However, the reflexivized possesser N always modifies the object N. If an underlying possessive sentence is not embedded in a NP, it will not act as modifier, like other possesser N.

For example, the sentences with possessive constructions are such as the following :

149. rām ka bhāi bimār hai ' Ram's brother is ill'.

150. rām ne mohan kā ghoṛā xaridā hai
'Ram bought the horse of Mohan'.

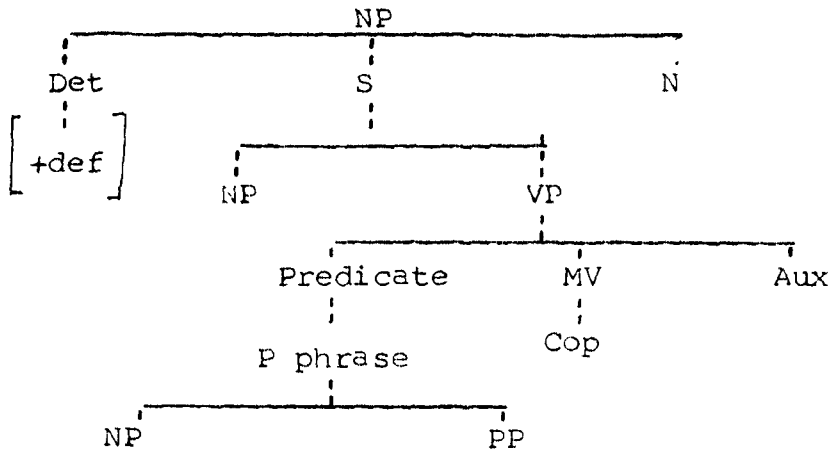
151. laṛki apni kītāb paṛh rahi hai
'The girl is reading her book'.

152. merā bhāi dilhli se āyā hai
'My brother has come from Delhi'.

153. rām ne merā ām khāliyā
'Ram ate my mango'.

154. maĩ ne apnā kām xatam kar liyā
'I have finished my work'.

All the constructions of the form NP Kā NP with a possessive meaning, are derived from underlying structure of the type.



The relation of noun to noun is signified by the postposition Kā 'of'. The post position Ka is said to be functioning as possessive marker. In the structure NP Kā NP, the initial noun is possesser N which is in the oblique case and is followed by the post position Kā (or its equivalents). The second noun is possessed N which is in the direct case. The possessive marker Kā which relates to nouns, agrees in gender and number with possessed N. Examples are given such as the following:

155.	rām ki beṭi	' daughter of Ram'
156.	tumhāri kītāb	' your book'
157.	mere kapre	' my clothes'

It has been mentioned that the first and second person pronoun (except Hon. āp) used as possesser N, take rā in place of Kā 'of' that will be interpreted by the phonological rule.

That is, all the phrases of the form NP Kā NP, having a possessive meaning, are derived from underlying structure of the form which contains copula as MV, preceded by the post positional phrase. The possessed N which is in the direct case is the NP of S. The possesser N which is in the oblique case and is followed by post position either Kā, kepās, or mẽ, is dominated by VP. However, the possesser N which contains the feature (+ Animat.), is said to possess some thing.

The sentences, containing possessive form such as the

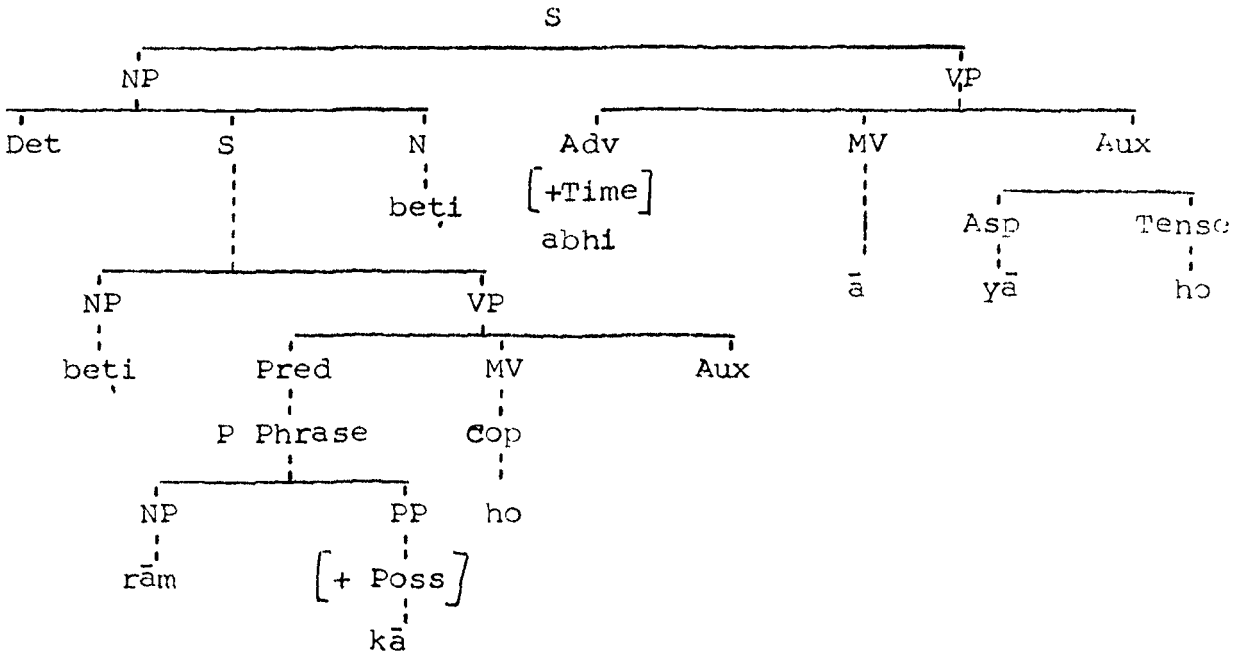
following, have the underlying structure such as that given below :

158. rām ki beṭi abhi āi hai

'Ram's daughter has come just now'

159. bacce ki mā̃ so rahi hai

'Baby's mother is sleeping'



The T.Rules that are applied to the structure mentioned above are: The 'Relativization Transformation' and Relative Reduction. The Relativization Transformation is applied, in case the provided condition for embedding is satisfied, and transforms the underlying structure to:

jo beṭi rām kā hai voh beṭi abhi āyā hai

'The daughter who is of Ram the daughter has come just now'.

The Relative Reduction' reduces the relative clause and transforms it to intermediate structure which has the final form after 'Agreement Rules':

160. rām ki beṭi abhi āi hai ' Ram's daughter has come just now'.

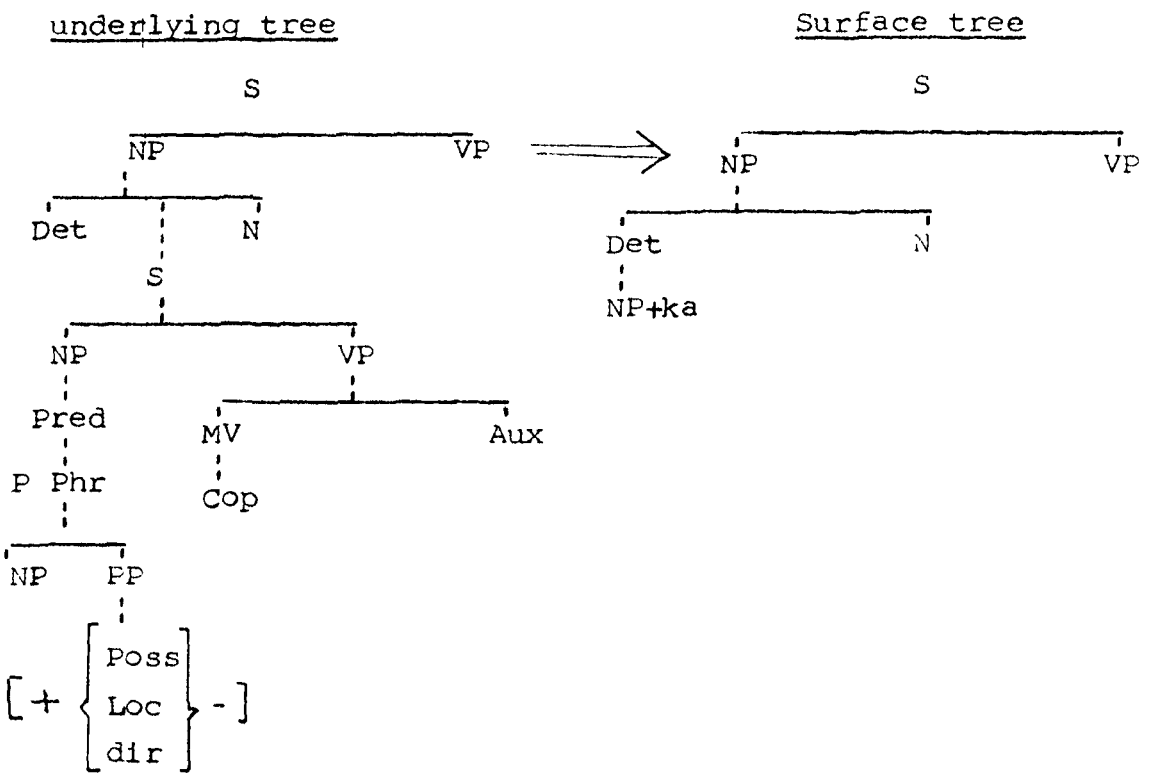
Mrs. Kachru (1968)[19] in her analysis of possessive constructions, proposes a list of post positions such as ke, ke pas, ko, mẽ and ka, that are preceded by possesser. N.Kā is genitive postposition which agrees in gender and number with possessed N. Ke is invariable particle in her view, ke pas is a compound postposition, ko is directional and mẽ is locational postposition. The examples of possessive phrases and the sentences corresponding to them are noted below :

161.	rām ki bĭhĭn 'Ram's sister	161(a)	rām ke ek bĭhĭn hai 'Ram has a sister'
162.	rām kā dost 'Ram's friend'	162(a)	rām ke ek dost hai 'Ram has a friend'
163.	Sitā ki do bĭlliyā̃ 'Sita's two cats'	163(a)	Sitā ke do bĭlliyā̃ hai 'Sita has two cats'.
164.	bĭlli ki dum 'Cat's tail	164(a)	bĭlli ke ek dum hai 'The cat has a tail'
165.	bacce ki nāk 'The child's nose'	165(a)	bacce ke ek nāk hai 'The child has a nose'
166.	laṛke ki kĭtāo 'The baby's book'	166(a)	laṛke ke pas ek kĭtāb hai 'The boy has a book'

167.	merā naukar 'My servant'	167(a)	mere pās ek naukar hai 'I have a servant'.
168.	bacce kā buxār 'The child's fever'	168(a)*	bacce ko buxār hai 'The child has fever'
169.	Uski hImmat 'His courage'	169(a)	Usmẽ hImmat nahĩ 'He has no courage'
170.	rāju kā dhairya 'Raju's patience'	170(a)	rāju mẽ baṛā dhairya hai 'Raju has a great deal of patience'.

The phrases 161-170 contain the post position kā, which agrees in gender and number with possessed N. The sentences 161 a-170 a, however, are non identical in their structure: 161a-165a contain ke which is an oblique form of kā, 166a-167a contain the so called compound post position ke pas, 168a contains the directional postposition ko and 170a contains locational postposition mẽ[20]. Sentence 168a is turned out to be grammatically different in the present study.

The underlying representation for phrases such as 161-170 is as follows :



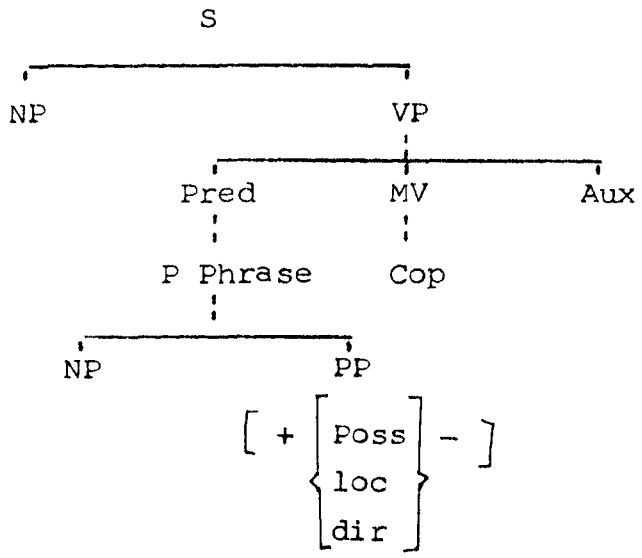
It is noted that the transformational rules apply in case a copulative sentence of the form outlined above for possessive expression is embedded in a NP. The T.Rules applied to the underlying structure, delete indentical noun and the copular verb +Aux. Further more, the surface form is yielded through 'Agreement Rules'.

The Relative Transformation and Relative Reduction are not applied to the underlying structures of sentences such as 161a-170a. Only 'Possessive Transformation rule applies to generate the surface structure of sentences such as 161a-170a, only because of the deep structure of sentences 161a-170a is not embedded into a NP. T.Possessive rule permutes the elements

of possessive sentence i.e. it transforms ek kItāb mere pās hai to mere pās ek kItāb hai.

The deep structure of sentences 161a-170a is as the following:

Underlying tree:



The post positions used in the possessive constructions in Urdu/Hindi, originate in the deep structure and their surface forms i.e. the spoken forms of the possessive e.g. kā, ke, ke pās, ko and mẽ are interpreted by the later phonological rule, if needed.

Mrs. Kachru in her treatment of possessive constructions in Urdu/Hindi, substitute kā for ke, ke pās, ko and mẽ etc. through Relative Transformation[21]. But this analysis differs from her approach and prefers to generate the surface forms

i.e. the spoken forms of these postpositions through phonological rule.

She treated ke as an oblique form of kā before pas, is obviously satisfactory. But ke has been set up as a separate postposition in her treatment rather than as an oblique or inflected form of kā. It is treated as a variant of kā rather than a separate postposition in this study.

The context of the occurrence of ke, ke pas, ko, mẽ etc. has been discussed in her analysis in detail but hereunder an attempt is made to summarize the environmental conditions for the occurrence of these postpositions mentioned above.

It is noted that the postpositions are obviously associated with possesser N but occur in context of possessed N. The context of the occurrence of ke and ko is ruled out in the present discussion. But in some context ke and ke pas are seen in free variation, e.g.

171.	rām ke do naukār haĩ	'Ram has two servants.'
171a.	rām ke pās do naukar haĩ	'Ram has two servants.'
172.	rām ke do gāẽ haĩ	'Ram has two cows.'
172a.	rām ke pās do gāẽ haĩ	'Ram has two cows.'
173.	rām ke do bāɣ haĩ	'Ram has two gardens.'
173a.	rām ke pās do baɣ haĩ	'Ram has two gardens.'

The above mentioned examples make it clear that the possesser N will contain the feature [+Animate] and the context

for the occurrence of ke pas is :

Possesser N	Possessed N	Post position
[+ Animate]	{ [[+ Human, Profession]] [- Human] } { [- Animate, - Abstract] }	ke pās

The statement of the context for the occurrence of mẽ, therefore is :

Possesser N	Possessed N	Post position
[+ Animate]	[+ Abstract, state]	mẽ

The statement of contexts for the postposition, ko and mẽ is not simple one. The above examples make it clear that mẽ occurs in the context of possessed N which contains the features [- concrete] and denote states e.g. courage, enthusiasm etc. Ko occurs with subject nouns so that it has been ruled out. But in some context, not only ko and mẽ but also ke pās occur in free variation, e.g.

174 (a) rām ko aql nahĩ 'Ram is not intelligent'

174 (b) rām mẽ aql nahĩ 'Ram is not intelligent

174(c) rām ke pās aql nahĩ ' Ram is not intelligent'.

In the light of the above examples, the context for ko and ko vs. mẽ is very complicated. But it is not so far clear how those could be handled. One way of handling these problems would be as follows : The phonological rules, in addition to the set of rules which specify the features of the postpositions as well as inherent features of N, could be allowed to specify the restriction between noun and postposition. Ko such as in 174a never occurs as possessive PP but rather a dative ko. The phrases of the form N kā N which are identical to the phrases mentioned above are noted below :

175.	gāõ ki aurtẽ	'The women of villages'
176.	kamre kā darvāzā	'The door of the room'
177.	dIl kā dard/ hāth ki ungliyā (hi)	'Pain of heart'/ figures of hand'
178.	Xushi ki bāt	'matter of pleasure'
179.	rIhIm ki darxuāst	'Appeal of mercy'.

There is no grammatical justification to regard these phrases as different from phrases such as 161-170. In the phrases 175-179, the genitive postposition ka relates two nouns and also agrees in gender and number with possessed N. The possesser N, in these phrases does not contain the feature [+ Animate] . The phrases 175-179, then are are so called genitive phrases. As the set of rules as formulated above will

apply to generate the phrases, such as 175-179.

In the underlying structure of genitive phrases, a new feature [+genitive] is added under the mode of PP. The rule may be modified like the following.

P Phrase ⟶ NP + PP

PP ⟶ [+ — — — {Poss, loc, dir, genitive} −]

However, the feature [+ genitive] will insure that ka will occur with possesser N containing feature [- Animate] .

There are, however, another group of phrases of the form N kā N in Urdu, which are indentical semantically as compared with the phrases such as 25-29. Examples are such as the following:

180.	dard-e-dIl	' Pain of heart'
181.	sadr-e-mumlIkat	' President of country'
182.	shān-e-hind	' Grace of India'
183.	shaix-ul-jāmIā	' Head of the institution'
184.	ālIm-ul-ɣaib	' Who has the knowledge of future'

The phrases 180-182 contain the genitive particle -e- and 183-184 contain -ul- which relates two nouns; they follow the so called possessed N and preced the possesser N. Genitive e

originally belongs to Persian and-Ul-to Arabic language. These are the examples of literary Urdu that are purely based on Perso-Arabic structures.

There are, however, some cases in which genitive marker kā is deleted from the phrases. Consider the examples such as the following:

185. Suraj gīrhan
186. cad gīrhan
187 kan top
188. mezposh
189. kabutar xānā

A careful examination makes it clear that the phrases such as 185-189, are not compound words. If some one presumes the phrases 185-189 to be derived by the same process which derives dIl kā dard etc. then it is not clear how the genitive kā disappears in phrases such as 185-189.

This is another item such as vālā 'agency' which relates two nouns in the phrases such as the following :

190. rām vālā ghorā
191. Iskul vāli kāpi

If, however, the phrases such as 180-184 are related to the phrases discussed above, then it is not clear how these could be handled.

There are, however, some phrases which creat a complication, if an attempt is made to handle them. These are noted in the following:

192. shahri log ' The people of the city'

193. sarkāri Imārāt ' Govt. building'.

The phrases of the following types :

194. prem cand ke nāvIl ' Prem Chand's novels'

195. Sone kā hār ' A neccklace of gold'

196. urdu ki parhāi ' Teaching of Urdu'

197. rām kā patr lIkhnā ' Ram's writing a letter'

do not come under the scope of this study. These are taken care of in an other part of the work.

The claim that the phrases of the form NP + Kā + Abstract N i.e. angrezi ki parhāi is derived by Abstract nominalization transformation, is not unsatisfactory[22]. As regards phrases such as aurat ka IntIzār shyām ki carcā, bacce ki tārif etc. the best solution is to consider these phrases as related to the possessive phrases. There is no grammatical justification to regard these phrases as different from phrases such as 161-170. In the phrases such as bacce ki tārif 'Child's praise' the possesser N contains the feature [+ Animate] like the phrases such as 161-170.

It is obvious from this preliminary discussion that the question of possessive expressions in Urdu/Hindi requires further investigation and separate research.

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CHAPTER-IV

NOMINALIZATION

The process of Nominalization deals with the ways in which clauses can be combined to produce a new complex sentence. An underlying clause that is embedded in a noun phrase undergoes a transformation that results either in KI-S complement or in NPKa-Vna phrases. Both, KI-S and NP Ka-Vna complements occur in object as well as subject NP-complementation. The underlying clause embedded in a NP when comes to the surface is said to function as a NP complement. The condition for the application of NP complementation rules are not satisfied, unless the NP which dominates a nominalized clause is distinct from the NP of the embedded clause.

In addition to clausal and infinitival complements, there are also some other phrases such as NPs, Adjectives and participles that are used to function as NP-complement.

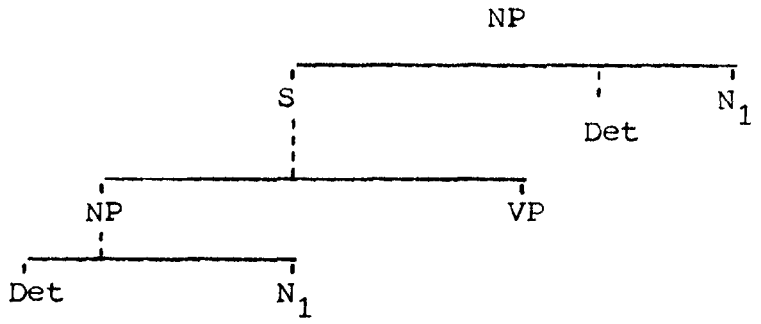
Noun Phrase Complement

In this chapter an attempt will be made to show that all the sentences embedded in a NP are instances of NP-complement and how Urdu/Hindi creates new NPs if they are treated as such.

Sentences embedded in a NP may function in various ways : Noun Modification and NP Complementation. The sentences

sentences embedded in a NP are said to function as relative clauses or noun modifiers if the nouns of both the embedded and matrix sentences are governed by the condition of identity. If, however, the noun dominated by the NP of embedded S and the noun dominated by the NP which dominates the embedded S are non identical, the embedded sentences are said to be functioning as NP complementation[1].

A consideration of the following structure makes it clear that the N_1 and the N_2 must be non identical:



Some instances of NP-complements are provided by the sentences such as the following :

1. yeh sharm <u>ki bāt</u> hai <u>kī āp sharāb pite haĩ</u>
   'It is a matter of shame that you drink wine'.
2. <u>āpkā bekār ghumnā</u> ṭhik nahĩ
   'It is improper for you to wander joblessly'.
3. maĩ ne dekhā <u>ki rām parh rahā thā</u>
   'I saw that Ram was reading'.

4. mai̯ āshā kartā hū̃ ki āj rām zurUr āegā

'I hope that Ram will come surely today'.

5. baccā ge̯d khelnā cāhta hai

'The child wants to play the ball'

6. qalam lIkhne ke liye hai

'The pen is for writing'.

7. baccā kutte ke bhokne se dargayā

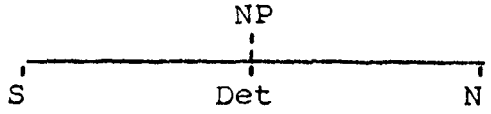
'The child feared because of barking of dog'.

An examination of above sentences reveals the facts that the underlined strings are seen to contain the structure as clause (sentence 1,3 & 4) as well as phrases (sentences 2,5-7). It is noted that all the above underlined strings are the instances of NP complementation. The strings introduced by kI item might be called as KI-S complement or clausal complement. If, however, the strings are like phrases and contain either ka after NP and na after V or only na after V followed by an optional post-position, they are called NP ka-V na phrases or infinitival complements. There is some evidence to support the claim that the embedded sentences in Urdu/Hindi result in two different forms : NP ka - V na phrases and kI-S complement. The other fact may also be emerged from an examination of above underlined phrase that they may be either in direct NP-complementation, as in the sentences 2 and 5 or in oblique NP complementation such as the ones in 6-7. It is noted that oblique NP complements do not appear in subject noun phrases.

The items kI 'that' and ka -na are two identical characteristic signals of nominal complements but they behave differently. The item kI is called a clause complementizer and ka-na is called an infinitive complementizer. This will be clear from the following that the complementizers are introduced into deep structure by the complementizer transformation.

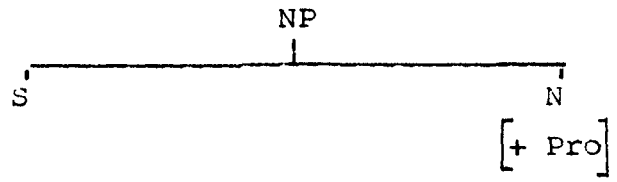
The verbals such as dekhna 'to see', kahna 'to say', sunna 'to hear', sochna 'think', hatana 'to tell', samajh na 'to understand', lagna 'to seem', manna 'to recognize, jānna 'to know', puchna 'to ask, cāhna 'to want ' dena 'to give' etc. belong to a set of verbs that take such complements. A sub clause of intransitive verbs such as cau kna 'to startle' ḍarna, 'to fear', jāna 'to go', āna 'to come etc. and those that belongs to the category of copulative verbs could be added to the above list[2].

The underlying structure of a NP complement construction, embedded in a NP, unlike a relative clause, precedes either a noun or Det +N. To generate a NP-complement, an underlying tree representation is proposed such as below:



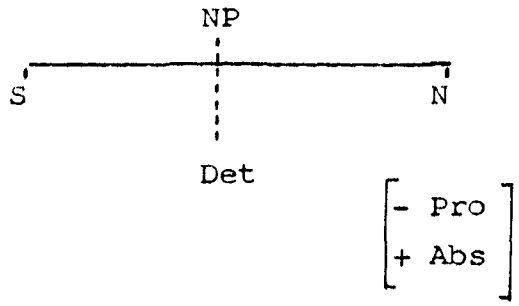
If the dominating NP contains the noun with the feature [+pro], the underlying structure is such as the following :

(a)



If however, the embedded S is followed by Det + N, the underlying structure would look like :

(b)



It is to be noted that both the possibilities (a) and (b) can be summarised by the rule, as formulated earlier. The sentences 2 and 5-7 are the examples of (a) and sentences 1 and 4 are the examples of (b).

However, the embedded S which is said to function as a NP-complement may appear in subject NPs, as in sentences 1-2, or in object NPs as in sentences 3-7. It is clear from an underlying structure as proposed above that every NP, no matter wnere it appears in a deep structure, may contain a sentence functioning as a nominal complement in apposition to an abstract nominal or pronominal head.

As was mentioned in the structure such as that proposed above, there are two types of nouns (an abstract N and pronominal yeh) in Urdu/Hindi which allow nominal complements.

The pronominal yeh 'it' takes both the kI-S complement and NP ka-v na complement whether it is in subject or object position in the underlying form. However, an abstract N whether it is in subject or object position takes only kI-S comp,ement rather than NP ka-na phrase. It is noted that in Urdu/Hindi, not all the abstract nouns take sentential complements but they have to be sub-categorised according to whether they take a sentential complement or not. For instance, nouns such as āsha 'hope' dāva 'claim' xabar 'news' yaqin 'belief' etc. take a S-complement, but the nouns such as dhairya 'patience' Istahkām 'firmness', dīlcaspi 'interest', afsurdagi 'sadness' etc. do not[3].

Sentences containing such complements are below :

(I) In subject position

8. āpkā yahā̃ ānā zururi hai
'It is necessary to you to come here'.

9. yeh anucit hai kI āp baccõ̱ ko marte hai
'It is improper that you beat the children'.

In object position

10. rām hāki khelnā jāntā hai
'Ram knows how to play hockey'.

11. baccõ̱ ne dekhā kI jahāz ur rahā thā.
'The children saw that an aeroplane was flying'.

Post positional object

12. latā yahā̃ paṛhne ko āi hai.
'Lata has come to read here'.

13. maĩ ne latā ke paṛhne keliye ek nāvīl xarida.
'For Lata to read I have purchased a novil'.

(II) In subject position

14. Us kā yeh dāvā kI daroɣā ghus letā hai bIlkul sahi hai.
'His claim that S.O. takes bribe is quite correct'.

In objective position

15. rām ne yeh Ittalā di kI mohan bimār hai
'Ram gave this message that Mohan is ill'.

That is, in (I), the NP complements function as subject, direct object and post positional objects. In 8-13, the clausesin the deep structure are in apposition to pronoun yeh. similarly in (II) clausal comp. function as subject as well as object of the respective verbs. In 14-15 the clauses are in apposition to abstract nouns such as dāvā and Ittalā and these head nominals along with their complement clauses function as subject as well as object of the respective verbs of the sentences.

Not all verbs, however, allow a full clause and an infinitival phrase as their complements. There is a long list of verbs that allow clausal complement. Verbs such as batāna

'tell' sunna 'hear' sochna 'think' samajhna 'consider', vishvās karna 'trust' jānna 'know' patā hona 'be aware' and patā lagāna 'find out' mānna 'agree' cahna 'wish parhna 'read and likhna 'write take clausal complements as direct object or predicate complements of particular governing verbs.

Verbs such as hona 'be' mānna 'accept' batāna 'tell' patā lagāna 'find out' etc. do not allow infinitival complements. The following examplify the non infinitival complements:

16. mai̐ rām ko apnā ustād mānta hū̃

'I consider Ram my teacher'

16a. mai̐ mānta hū̃ kI rām mera ustad hai

'I accept that Ram is my teacher'.

17. latā ko āsha hai kI āj mohan āega.

'Lata hopes that Mohan will come today'.

18. latā ne yeh batāya kI mohan bimār hai

'Lata told that Mohdn is ill'.

. Only verbs such as jā̃cna 'appeal' etc. do not take clausal complement.

19. mujh ko yeh kItāb acchi jā̃ci

'This book appealed to me good'

Other verbs that require the complement to be infinitival rather than clausal are, for example, sikh na 'learn, shuru karna 'begin', xatam karna 'finish', chorna 'give up' etc. e.g.

20. baccā hindi lIkhna sikh rahā hai
'The child is learning to write Hindi'.

21. qavvāl ne do baje gāna shuru kiya
'The singer began to sing at two O'clock'.

22. rām ne sharāb pina chor diya
'Ram gave up to drink wine'.

There is, however, a group of verbs such as kah na 'say' dekhna 'see' cāhna 'wish' samajh na 'consider', bhulna 'to forget' etc. that take both, clausal and inflinitial complements, e.g.

23. hm ne yeh dekha kI ghore daur rahe the
'We saw it that horses were running'

24. ham ne ghore ka daur na dekha

25. ashok ne latā se kahā kI voh cāi banāe

25a. ashok ne latā se cay banāne ko kahā
'Ashok asked Lata to make some tea'.

The clausal complement must be in optative form in case it occurs with the verbs such as cāhna 'wish', bulāna 'invite' etc. The following is illustrative :

26. baccā cāhta hai kI gẽd khele
'The child wants that he (should) play ball'.

A sub class of intransitive verbs such as ānā 'come'

jānā 'go' ḍarnā 'fear' etc. can allow the Aux element in the clausal complement to be in the optative, e.g. (Kachru 1964)[4]

27. naukar Isliye bāzār gayā hai ki dudh lae

'The servant went to the market so that he (should) bring some milk'.

28. bacca Isse ḍar gayā ki kutte bhauke

'The child feared because of barking of dogs'.

The sentence is not ungrammatical in case the Aux. element is progressive, e.g.

29. baccā Isse ḍar rahā hai kI kutte bhok rahe haĩ

'The copula hai 'is' and thā 'was' is one of the few verbs that allow an infinitival as well as clausal complements:

30. yeh sahi hai ki ram sharāb pita hai

'It is correct that Ram drinks wine'.

31. āpkā vahā̃ jāna ucIt nahĩ

'It is not proper for you to go there'.

It has been discussed that casual as well as infinitival complements function as subject, direct object and post positional objects. Not all predicates however, allow subject and object complements. Predicates such as sahi 'correct 'munāsIb 'proper' thik 'correct, zurruri 'necessary', mushkIl 'difficult etc. take clausal and infinitival complements as subjects:

32. rām ka biṛi choṛ na mushkIl hai

'It is difficult for Ram to give up smoking'

33. yeh sahi hai ki Usne biṛi choṛ di

It is correct that he gave up smoking'.

It is correct that the subject of the infinitival complement takes the genitive kā 'of' in case the predicates such as sahi, ṭhik, ucit etc. are in the sentence, e.g. in 32.

It is to be noted that there are, however, some cases in which infinitival complements function as adverbial or object of post position and can move to the initial position of the main sentences. The following are illustrative :

34. mā ki yād āne par baccā udās ho gayā

'The child became sad because of remembering his mother'.

35. āpke āne se mujh ko bahut xushi hui

'I am happy on account of your coming'.

36. āp ke bulāne se rām āgayā hai

'Ram came because you called him'.

It is noted that the subject of infinitival complement is deleted in case it is identical and coreferential with either the subject or object of the main sentence. The following exemplify the above mentioned claim:

37. maí ne kIsano ka hal calana dekha

'I saw farmer to plough'.

38. baccā gẽd khelnā sikh rahā hai
'The child is learning to play with the ball'.

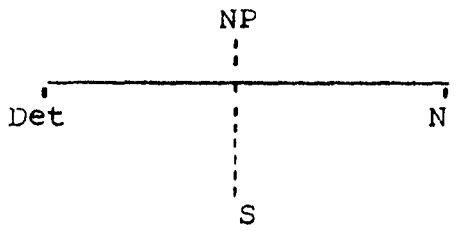
39. maĩ ne rām se ghar jāne ko kahā
'I said Ram to go to house'.

40. maĩ ne rām ko khelne ke liye bulāyā
'I called Ram to play'.

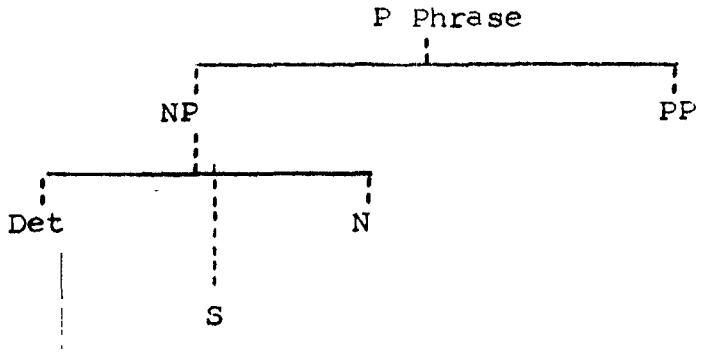
Sentence 38,allow subject identity condition and in 39-40, subject of complement is identical to the object of the finite verb. It is observed that in sentence 37, the subject ofcomplement is distinct from the subject of finite verb and subject of complement is followed by genitive postposition kā.

In her analysis of NP complement construction in Hindi, Mrs. Kachru (1968:64-81) adopts the embedded source position. She treats the lower S an optional expansion of the NP which is latter embedded, to act usually as complement either of subject or of object NP. According to her, the NP-complimentation involves the following underlying structure[5].

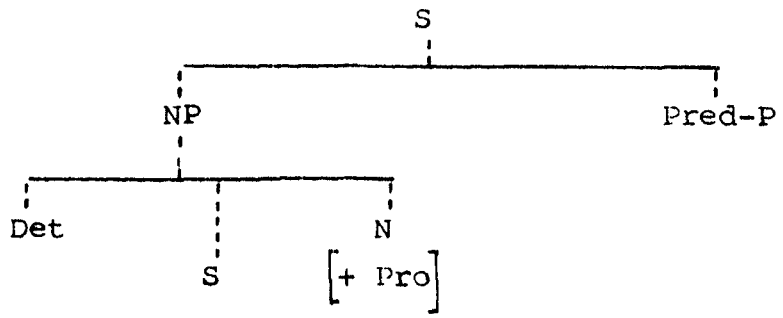
A. Direct NP complementation



B. Oblique NP-complementation



The main arguments with regard to NP-complementation in Hindi that Mrs. Kachru presents are the following:
First, in the subject NP-complement construction only the NP-ka-V na phrase occurs, if the underlying tree representation is as follows :



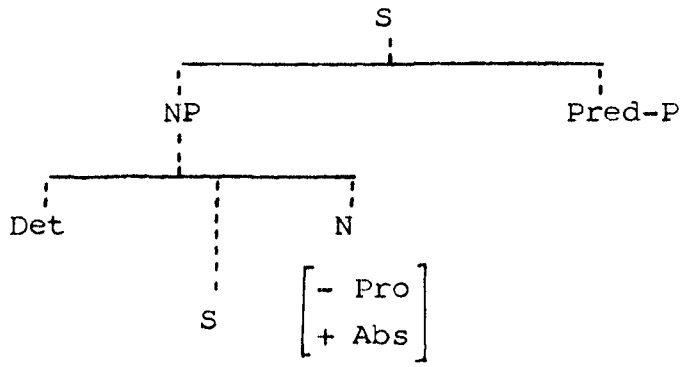
Sentence such as

41. tumhārā der se ghar lot na thik nahi.

'It is not proper for you to come late to the house'.

is an example of the above. If however, the underlying tree representation is such as (b) below, only kI-S comp. occurs:

(b)



Sentence such as (14) is an instance of (b), Second, the occurrence of both kI-S complement and NP ka-V na complements in object NP complementation is restricted by the verb in the main sentence. For instance, the verb kahna 'say' takes only kI-S complements. There is no sentence containing verb such as kahna which takes NP ka-V na complement e.g.

42. rām ne Uskā bambai jānā kahā

'Ram Ag. his Bombay to go said

Third, as regards the NP-complementation, both the complementizers and ka--- na occur in parallel way in order to derive such complements, The sentences such as the following are instances of the above :

43. mohan pāni lāne ko gayā hai.

'Mohan went to bring water'

43a. mohan Islye gayā hai kI pāni lae.

'Mohan went for this purpose so that he could bring some water'.

44. laṛkā bādlõ ke garajne se der gayā.
'The child feared because of roaring of the clouds'

44a. laṛkā Isliye dargayā kI bādal garje

It is argued that in her discussion,she failed to present a single instance of clausal complement that occurs in object position in apposition to an abstract noun rather than pronoun yeh.

It can be argued that the first argument presented by Kachru is not entirely correct, second is wrong and there is well argued answer for the third.

(I) It is not correct that in subject NP complement construction only NP ka ----V na phrase occurs if the dominating NP contains pronoun yeh. However, the instances in which the kI-S complement occurs as subject in apposition to pronominal head are like the following:

45. yeh burā huā ki rām calā gayā
'It was not proper that Ram went'

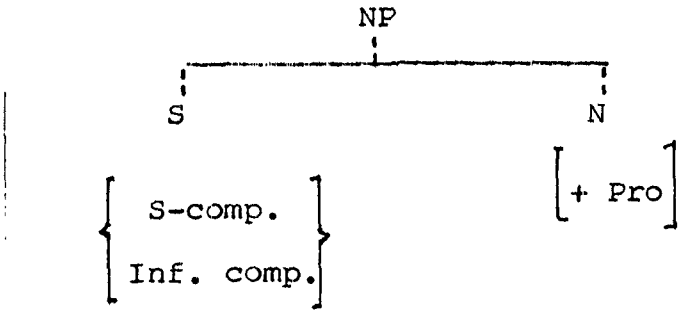
46. yeh sahi hai ki Uski shādi ho gai
'It is correct that he is married'.

In 45-46 underlined strings are in apposition to pronoun yeh and function as complement of subject noun phrase.

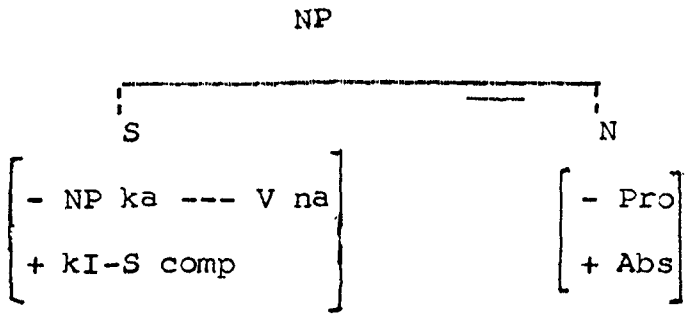
This, however, according to her on page 12, does not

seem to be unsatisfactory, to claim that both kI-S and NP ka-V na complement occur in object NP-complementation in apposition to pronoun yeh.

It seems reasonable to propose a modified underlying tree representation for both S-comp. and Inf. complements that occur both, in subject as well as object NP-complementation in apposition to the pronominal head yeh, such as the following:



But, this, however, is correct that if the underlying tree representation is such as (b) above, only kI-S complement occurs. This does not seem to be irrelevant to make it clear that abstract N can only take kI S-complement whether it is in subject or object position. The underlying structure for such complements would involve the following tree representation:



(II) It is not correct that the verb such as kahnā 'say' in the main sentence does not take infinitival complement. The evidence to support the claim that the verb kahnā takes an infinitival complement is as follows :

47. maĩ ne rām se āj dīhli jāne ko kahā
'I said Ram to go to Delhi today'

48. maĩ ne latā se mohan ke liye cāe banāne ko kahā
'I asked Lata to make tea for Mohan'

(III) In addition to,the oblique infinitival complement behaves exactly the different from clausal complement on the formal and semantic grounds. The status of clausal complement in sentence, such as the ones in 43a-44a is crucial, as compared with the sentences that contain clauses introduced by different types of adverbs such as kyũkī 'because' tākī 'so that' halãkī 'although' etc. corresponding to 43a. The following that exemplify purpose, reason, concessive, conditional etc. are listed below:

49. voh Isliye bāẋ gayā hai kī ām lāsake
49a voh bāẋ gayā hai tākī ām lāsake
'He went to garden so that he could bring some mangoes'

50. baccā Isliye xush hai kī Uske dost ā rahe haĩ
50a. baccā xush hai kyũkī voh fīlm jā rahā hai
50b. kyũ kī baccā fīlm jārahā hai Isliye voh xush hai
'The child is happy because he is going to see the movie'.

51. rām imāndār hai hālāki voh ɣarib hai

51a. hala ki rām ɣarib hai magar voh imāndār hai

'Although Ram is poor, he still is honest'

52. mãi zurur āũgā agar āpne bulāyā

52a. agar āpne bulāyā to mãi zurur āũgā

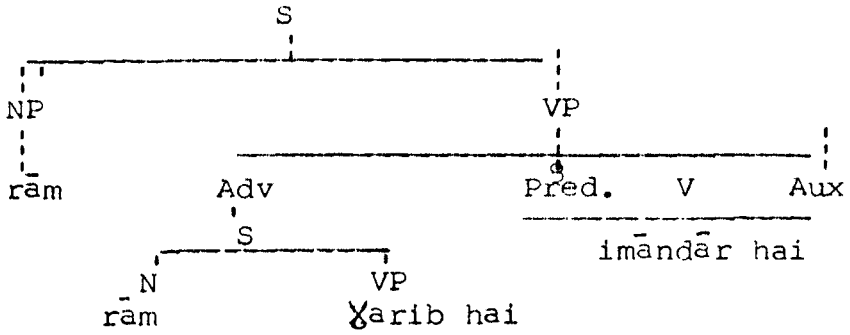
If you call me I will come sure

Mrs. Kachru (1980), in her analysis, derives these sentences such as 49-52a through the process of embedding in terms of nominization transformation[6]. If one accepts this proposal, the adverbs such as kyũkĪ, hālã kĪ, agar etc. could be treated as variants of the complimentizer kĪ 'that'.

The other point to be argued is that the clausal complement that occurs under post positional phrases could not be treated as oblique NP-complement because they are not followed by post positions like post positional infinitival phrase.

In this treatment the clauses such as in 49a-52a are derived through the process of Adverbial formation (see Adverbial clauses in Chapter-7).

For the most part, such complex sentences have relatively distinct deep structures for example, sentence (51) has the following deep structure:



This deep structure also underlines the sentence (51a) in which a clause moving operation is evidenced. By convention clausal complements do not move to the initial position of the main clause.

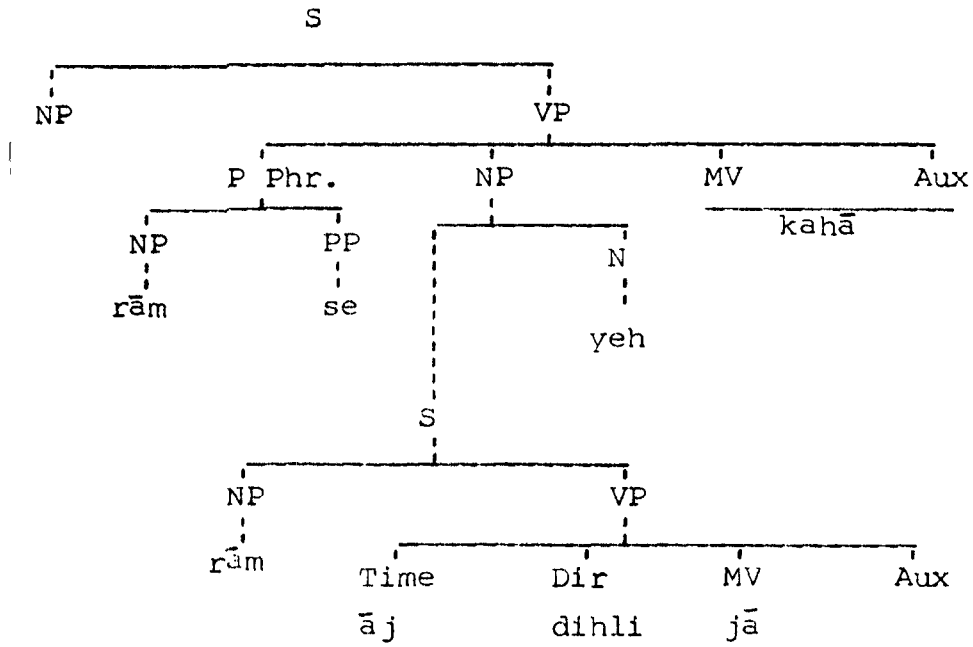
It can be argued that the peculiarity of clausal complement and adverbial clause is because of two distinct introducers being either dissimilar in form or function or both.

To sum up the discussion, a reasonable interpretation can be assumed that the clauses introduced by the adverbials that can move to the initial position of the main clause are derived through the process of 'Fronting rule' and those which can not move to the front of the main sentence could be generated through the process of embedding.

As far as the oblique infinitival complements are concerned, their occurrence under the P Phrases can be doubtful. One can assume that they must occur in side the object NP, which could occur directly under the immediate domination of VP. The question now arises if NP ka-v na phrase is a post-

positional one, how can a post position be placed after the derived complement. The best solution is that the postposition such as ko, se etc. are placed after NP ka-V na complement by the same post cyclic rules that assign dative ko to animate NPs in the ko-sentences in Urdu/Hindi, to the reciepent in the causative sentence and also to the object NP that are raised by Raising rule from subject to object position in the higher clause. It may also be argued that the same rule that assigns instrumental se to the mediatory agents in the causatives, assigns se to the infinitival complements.

The underlying, structure for sentence (47) would roughly look like:



It is to be noted that an oblique infinitival comp. is distinct from direct infinitival phrase, being dissimilar in

form and function. Oblique comp. takes PP preceding it and also functions as adverbial phrase, since it originates under the postpositional adverbial phrase. On the other hand, direct infinitival comp. do not take PP and function entirely as NP complement, whether they appear in subject or object position.

The process of nominalization in Urdu/Hindi, thus involves the following rules:

(1) Complementizer transformation

Complimentizer transformation is an obligatory transformation which introduces either kĩ 'that' or ka-na into the deep structure of the complement clause. The complimentizer kĩ 'that' is placed in front of the underlying complement clause and the whole structure of the sentence remains unchanged. In case the ka-na complementizer is introduced into the underlying structure, the following operations are performed.[7]

a. It attached the ka of the complementizer ka-na to the right of the subject NP and na to the right of V of the complement clause.

b. deletes the Aux of the complement clause.

c. embeds the string NP ka + v na -derived from the complement clause - in the N $\begin{bmatrix} + \text{Pro} \\ - \text{Abs} \end{bmatrix}$ position of the matrix clause.

It is noted that the complementizer transformation is a key rule in order to derive the NP-complements, e.g.,

53. ḍāktar ne mariz kā tarapna dekha.

53a. ḍāktar ne dekhā kI mariz taraprahā thā.

'Doctor saw that patient was restless'.

(2) Extraposition transformation:

Extraposition is an obligatory transformation which moves the clausal complement either to the end of the sentence or to the end of that clause in which it is embedded.

The sentence 11 and 15 are the instances of the above. Other instance is as follows :

mujh ko uske yeh kahne par ki voh bimār hai yaqin nahī āyā:

' I did not believe upon his saying that he was ill'

Extraposition may be either complete or partial.when a NP complement is not moved to the end of the sentence of which it is a constituent,the transformation that moves the complement clause to the right of the NP of the sentence rather than to the end of the sentence might be called a partial extraposition. The following exemplify the above :

54.. Uskā yeh dāvā kI voh fel nahī hogā bIlkUl sahi thā

'His claim that he will not fail is quite correct'

55. merā yeh shak kI voh sharāb pitā hai sahi nIklā

'My doubt that he drinks wine was correct'.

It is correct that each clausal complement requires the extraposition rule obligatorily, no matter whether it appears in subject or in object NPs in apposition to an abstract N or pronoun yeh.

There is, however, an-other transformation termed as pronominalization which converts the subject N of the clausal complement to the pronoun, in case the subject of the clausal complement is identical or coreferential with the subject of the matrix clause. The following is illustrative.

56. rām ne kahā kī voh kal bambay jaega
Ram said that he will go to Bombay tomorrow

(3) Equi-NP deletion transformation:

Equi-NP deletionrule deletes the subject of the infinitival complement, in case the subject of the complement and the subject or the object of the matrix clause are identical and coreferential and complement occurs as object or object of a PP in the infinitival form.

The following examplify the infinitival complement of the type.

57. baccā tairnā jāntā hai
'The child knows to swim'

58. latā paṛh ne ke liye āi hai
'Lata has come to read'.

There are, however, some cases in which the subject of the main clause and the subject of its complements clause are not identical and coreferential, the complement is in the infinitival form with the complement subject deleted. The instances provided by the sentences are such as the following:

59. khelnā acchi kasrat hai
'To play is a good exercise'.

60. juā khelnā buri ādat hai
'Gambling is a bad habit'.

(4) [+Pre] Deletion transformation:

[+pre] deletion transformation is an optional transformation which deletes the pronoun yeh. In case the complement occurs as subject, object or postpositiional object, i.e. adverbial to be infinitival in apposition to a pronominal head, it applies obligatorily:

61. āpkā yahā̃ rah na zururi hai
'It is necessary for you to stay here'.

62. ashok ghar jānā cāhtā hai
'Ashok wants to go home'.

63. latā paṛhne keliye Iskul gai hai
'Lata has gone to school to read'.

The transformation never applies to delete the pronominal head, in case the complement is in the full clause form and function as subject or postpositional object in apposition to a pronominal head. The examples are such as the following :

64. yeh munāsɪb nahĩ kɪ̃ āp ustādõ ko gāliyā̃ dẽ
'It is not proper that you abuse (your) teachers'.

65. baccā Isliye royā kɪ̃ voh bhukā thā
'The child wept because he was hungry'.

If the clausal complement functions as object of the verb such deletion may and may not be possible, e.g.,

66. rām ne kahā kɪ̃ use nĩd ārahi hai
'Ram said that he feels sleeping'.

67. yeh kɪsne kahā kɪ̃ latā bimār hai
'Who said it that lata is ill'.

68. Usko patā hai kɪ̃ rām kahā̃ rahtā hai
'He knows where Ram lives'.

69. maĩ yeh jāntā thā kɪ̃ voh nahĩ āegā
'I knew it that he will not come'.

70. maĩ soctā hũ kɪ̃ kyũ na dihli calā jāũ
'I think that I should have left for Delhi'.

71. mujh ko yeh lagtā hai kɪ̃ voh mujhse xafā hai
'I feel it that he is angry with me'.

72. rām jāntā hai kɪ̃ maĩ kyā kartā hũ
'Ram knows what I do'.

Complement Fronting transformation:

Complement Fronting transformation is an optional transformation which moves the complement and the following PP to the front of the sentence, in case it is in infinitival form and functions as an adverbial of object or a postposition. This, however, is not always possible.

These are the examples such as/following:

73. rām ke āne par mohan calā gayā

'Mohan went when Ram came'.

74. bacce ke mar ne se mā̃ dukhi hai

74a. Bacce ke marnese mā̃ ko bahut dukh huā

'Mother is sad because of the child's death'.

However, the sentences to which this transformation never applies are :

75. maĩ ne apni kItāb latā ko parhne ke liye di

'I gave Lata my book to read'.

76. latā kItābe xaridne bāzār gai hai

'Lata has gone to market to purchase the books'.

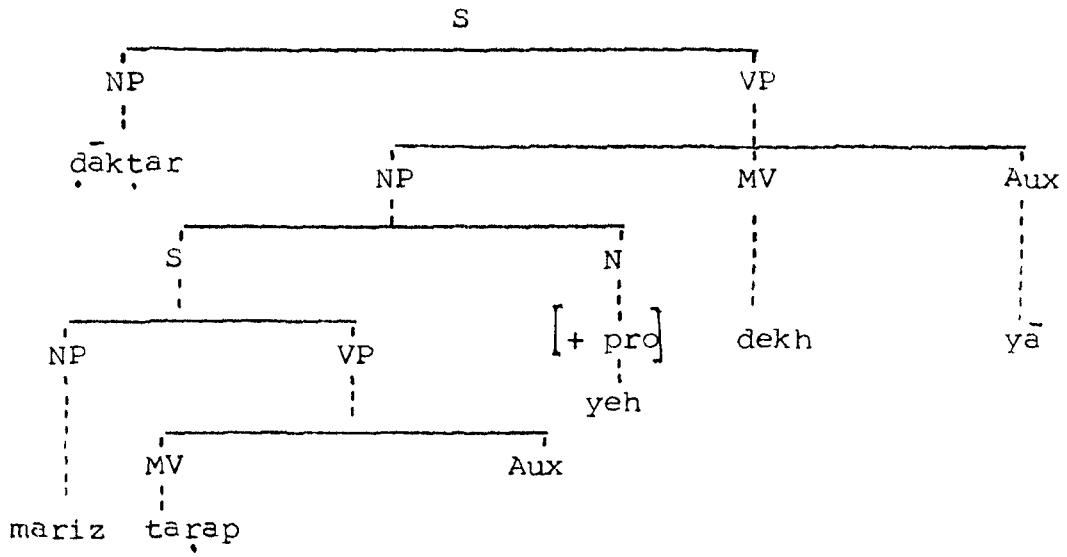
It is noted that the infinitival complement functioning as post positional object is used in various adverbial expression of time, reason, purpose, etc. The examples as noted above, in 73-76 sentences are of the type.

In certain context, an infinitival complement can also express the contrary action[8]:

77. mã̃ ke manā karne par bhi baccā rotā rahā

The deep structure and how the rules work in order to derive the NP-complements is mentioned below:

The underlying tree representation of sentence 53a is as follows :



The order of the rules applied, therefore is :

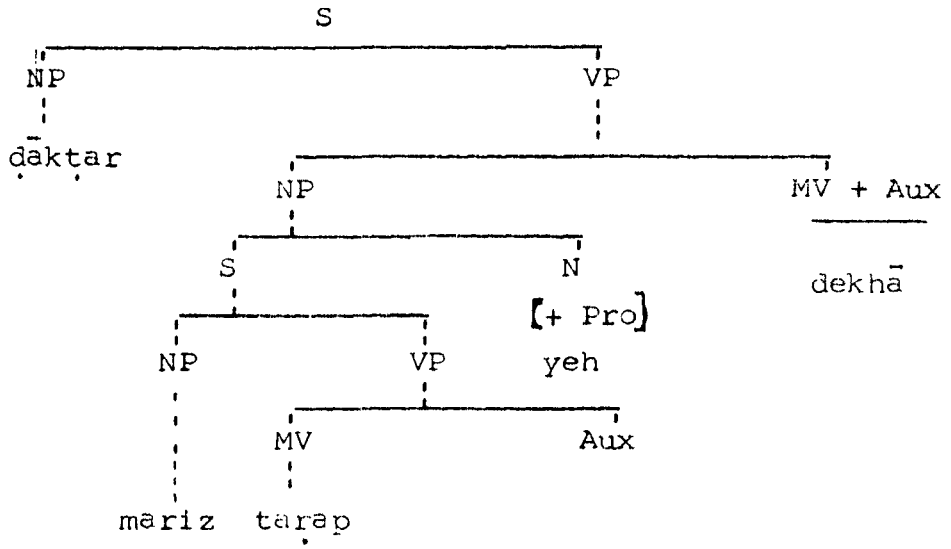
Complementizer transformation: kI complementizer placement

Extraposition : movement of the S_2

[+ Pro] deletion : deletion of pronoun yeh

post cyclic rule : placement of agentive ne

The underlying structure for sentence 53 is as follows:



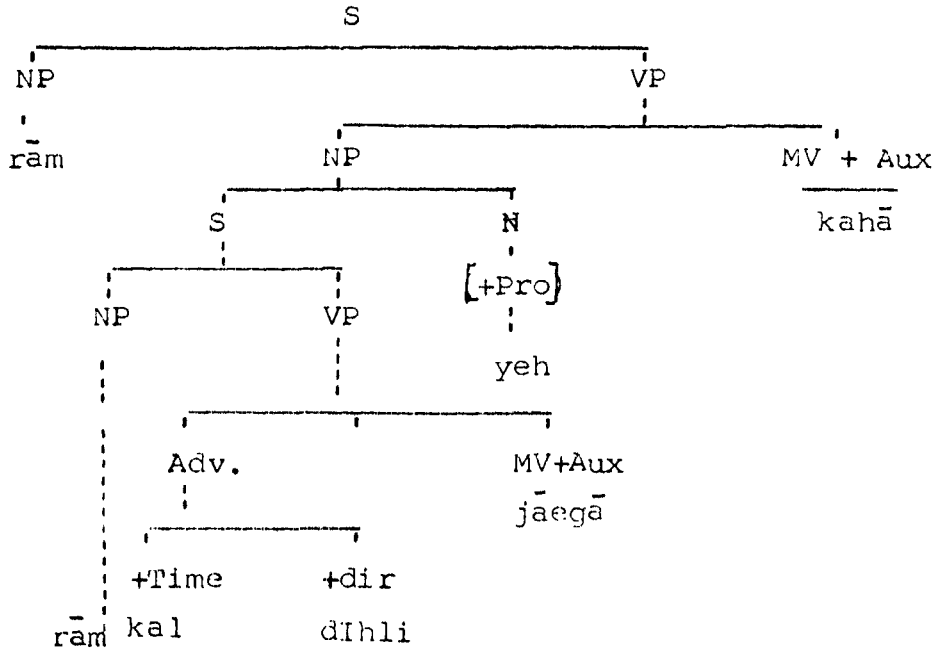
The rules applied to the underlying structure such as above, are as follows :

Complementizer Transformation: ka-na placement alongwith Aux. deletion.

[+ Pro] deletion

case Assigning rule

The deep structure of sentence 56 would look like the following



Rules applied are:

Complementizer transformation

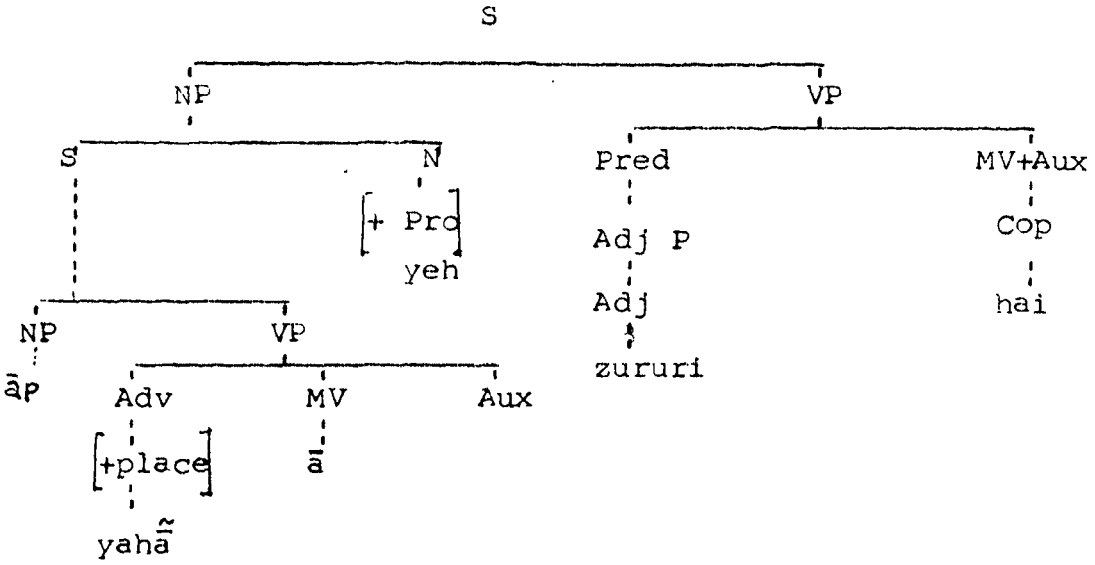
Extraposition

Pronominalization

[+Pro] deletion

Post cyclic rule

The deep structure of sentence (8) looks as follows :

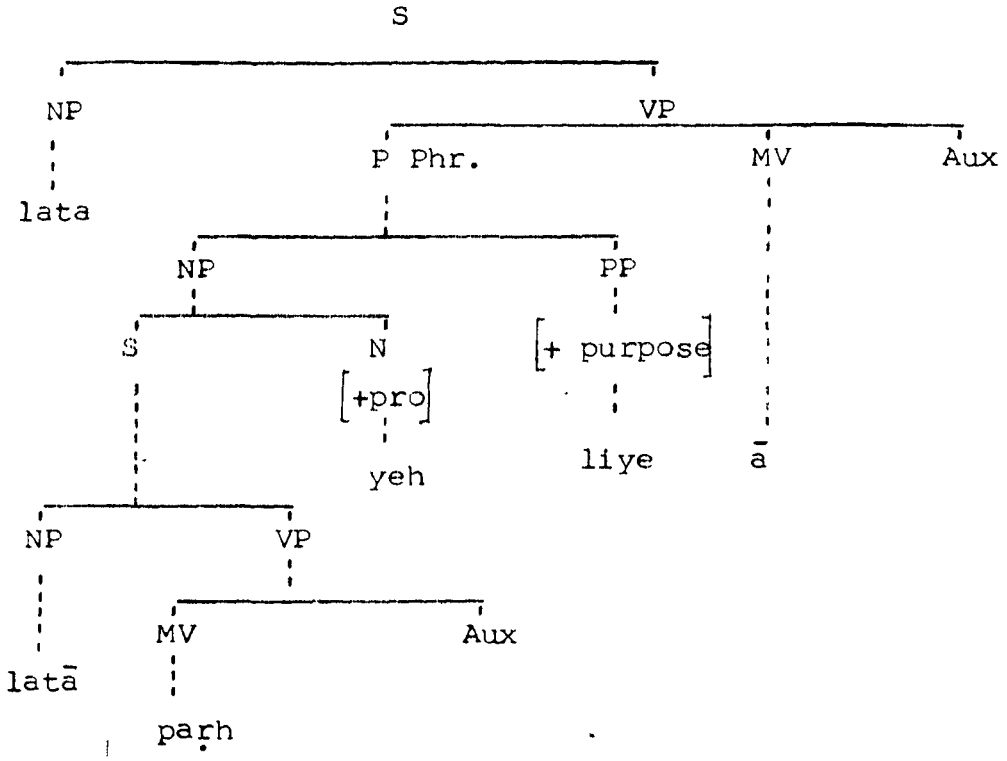


The rules applied are :

Complementizer Transformation

[+ pro] deletion

The underlying structure of sentence (12) is demonstrated as below:



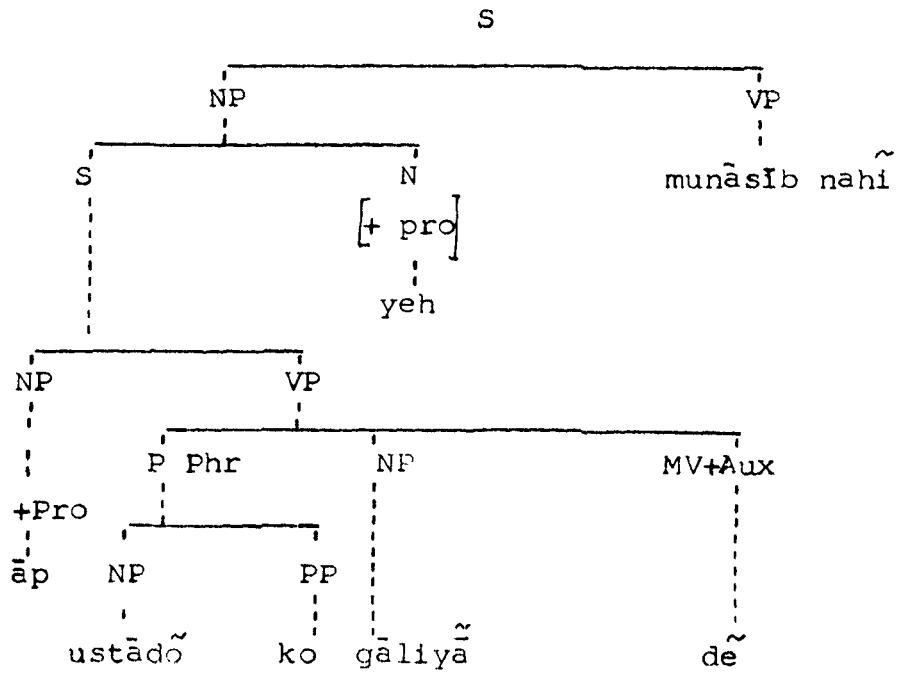
The rules that generate the surface form are :

Complementizer Transformation

Equi-NP deletion : deletion of the subject of the embedded S.

[+ pro] deletion

The underlying structure of sentence 64 would be one as below :

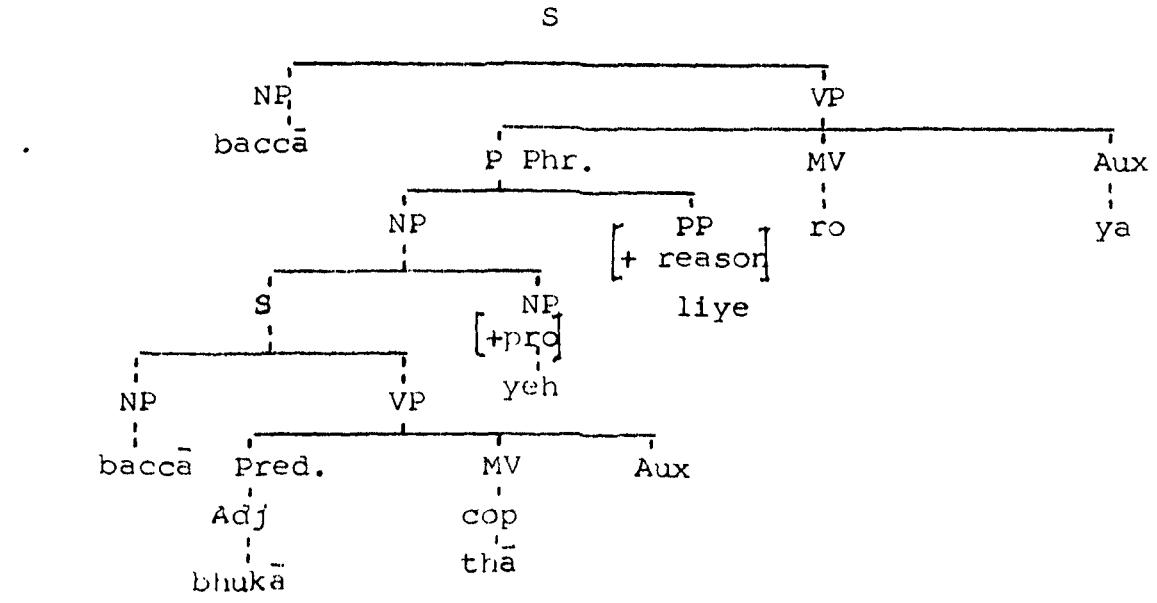


Application of the rules:

Complementizer Transformation

Extraposition

The underlying tree representation for sentence (65) is shown as below:

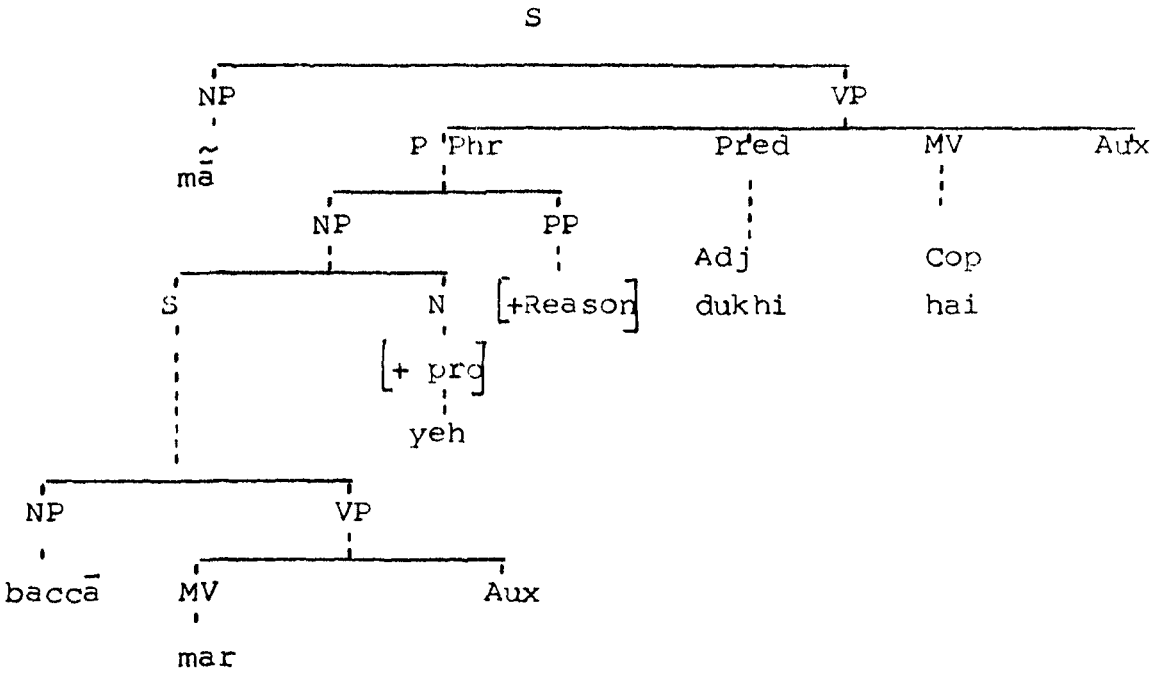


The rules that derive surface form are :

Complementizer Transformation

Pronominalization

The underlying string for sentence 74 is as below :



The following Rules are applicable to generate the surface form of (74).

Complementizer Transformation

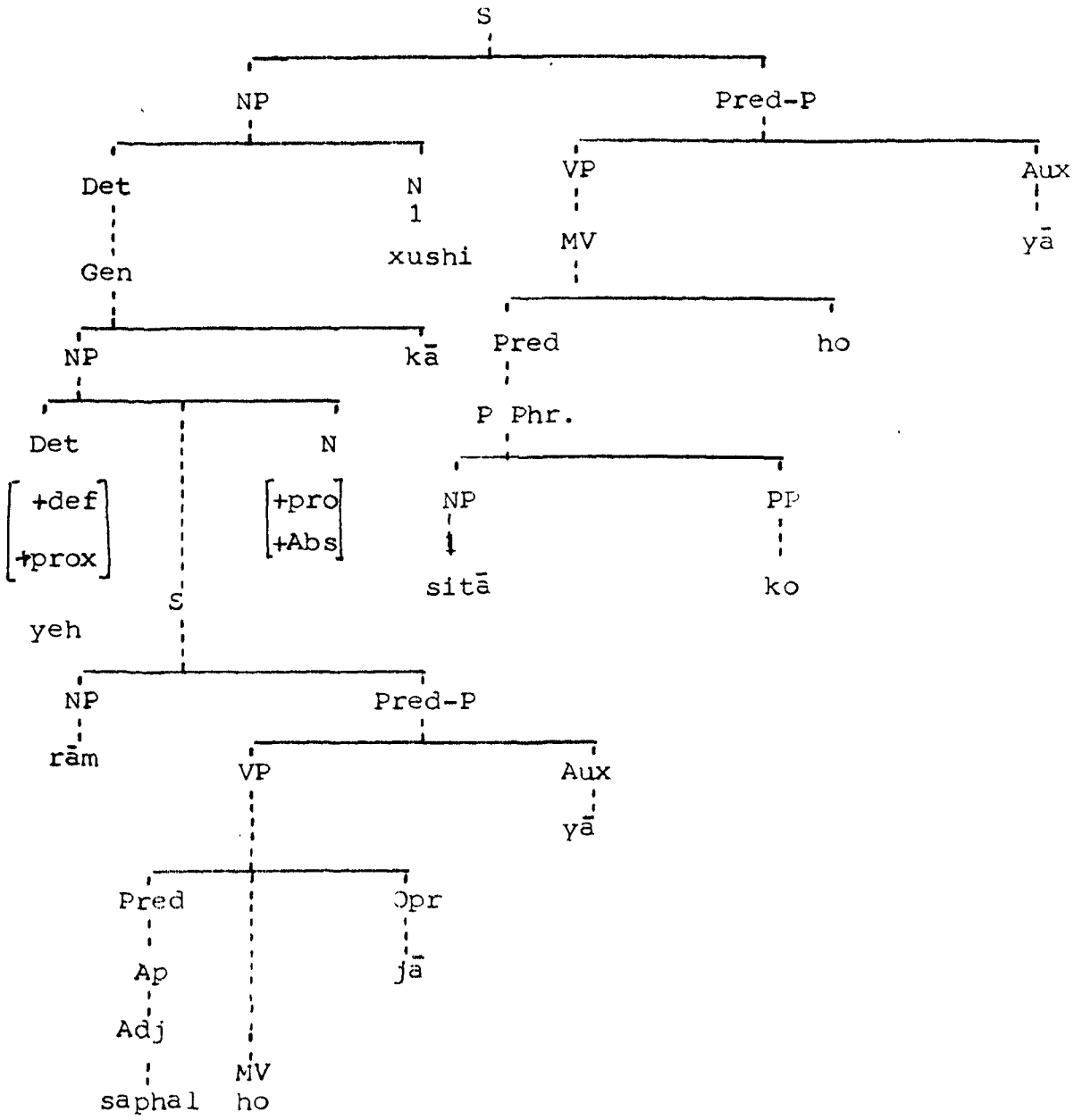
[+Pro] deletion :

Complement Fronting Rule : movement of the post positional complement.

Mrs. Kachru in her treatment of NP-complement, is thus claiming the following underlying tree for sentences such as below:[8]

78. sitā ko xushi hui kī rām saphal ho gayā

'Sita was pleased that Ram was successful.

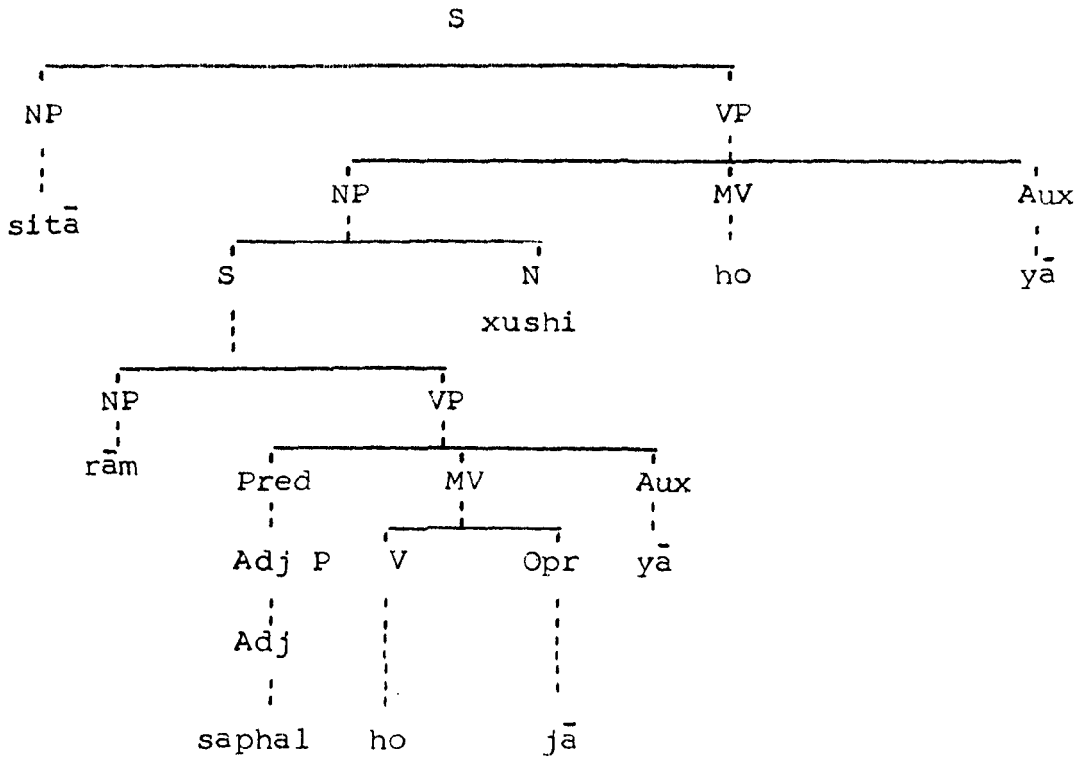


Her treatment of this sentence is some what puzzling, as she seems to contradict herself. For instance on page 55 she (1968) claims that sita ko in the above sentence is the predicate complement and xushi is the subject of honā. On the page 63, however, she (1980) states that in the following sentences mujhko 'to me' is the subject.

79. mujh ko xushi hai kI āp āgae.
'I am happy that you come'.

80. mujh ko makān nahĩ jãce
'The house did not appeal to me'.

In the present analysis the underlying structure of 78 is such as follows :



This agrees with Kachru's explanation of 1980, but clearly differs from one of the interpretations of 1968.

With regard to this discussion on page 29 and 35, she (1968) proposed a hypothesis that rām ko is predicate complement in sentences such as :

81. rām ko Xussa aya ' Ram became angry'

82. rām ko coṭ lagi.

etc. i.e. those which do not contain a possessive, and hence, do not require reflexivization. On the other hand, rām ko, Us ko, etc. are to be specified as subject in sentence such as :

83. rām ko apni kItāb mIli. 'Ram got his book'.

84. Usko apni sāri nahĩ jãci 'His own sari did not appeal to him'.

etc. which contain a possessive which has to be reflexivized.

It is, therefore, neither convincing nor satisfactory that in an identical context the underlying subject of such verb that requires a subject to be marked with a dative ko becomes an underlying predicate complement of the same verb that contains the same inherent properties.

The following sentences are compared below :

85. rām ko syām par krodh āyā

'Ram became angry on Shyam'.

85a. rām ko apne naukar par krodh āyā

'Ram was angry with his servant'.

86. sitā ko ghar yād āyā

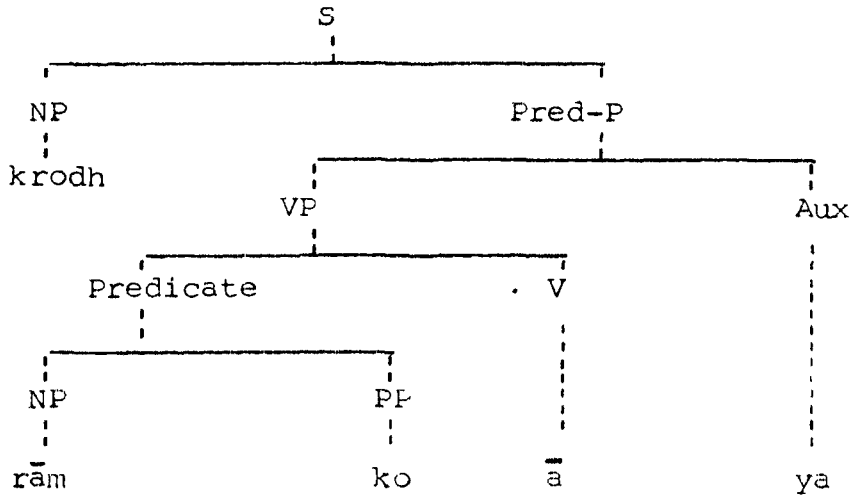
'Sita remembered home'.

86a. sitā ko apnā ghar yād āyā

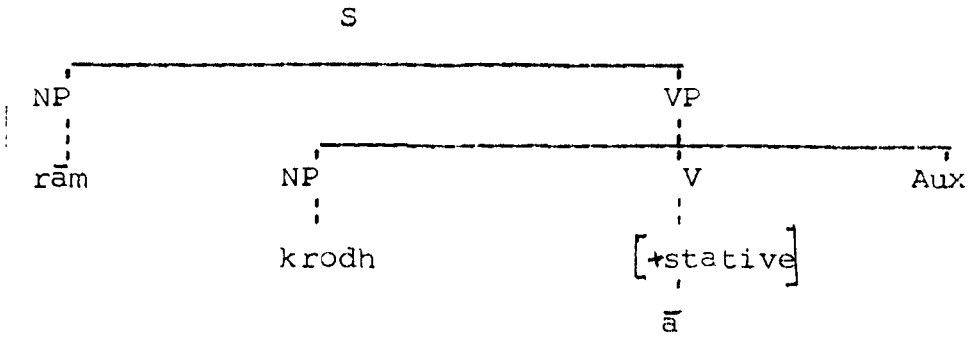
'Sita remembered his home'.

Other instance of contradiction in views of Prof. Kachru can be outlined as follows:

On page 24, she (1968) treats krodh as subject of the verb ānā in the following structures such as :



On the page 89 she (1971) clearly differs from her earlier opinion and treats krodh as predicate complement of the verb ānā. The following is compared from the above :



In addition to, an infinitival complement may be followed by genitive post position ka. The instances are such as the following :

87. āpke bāt karne kā dhang anucīt hai

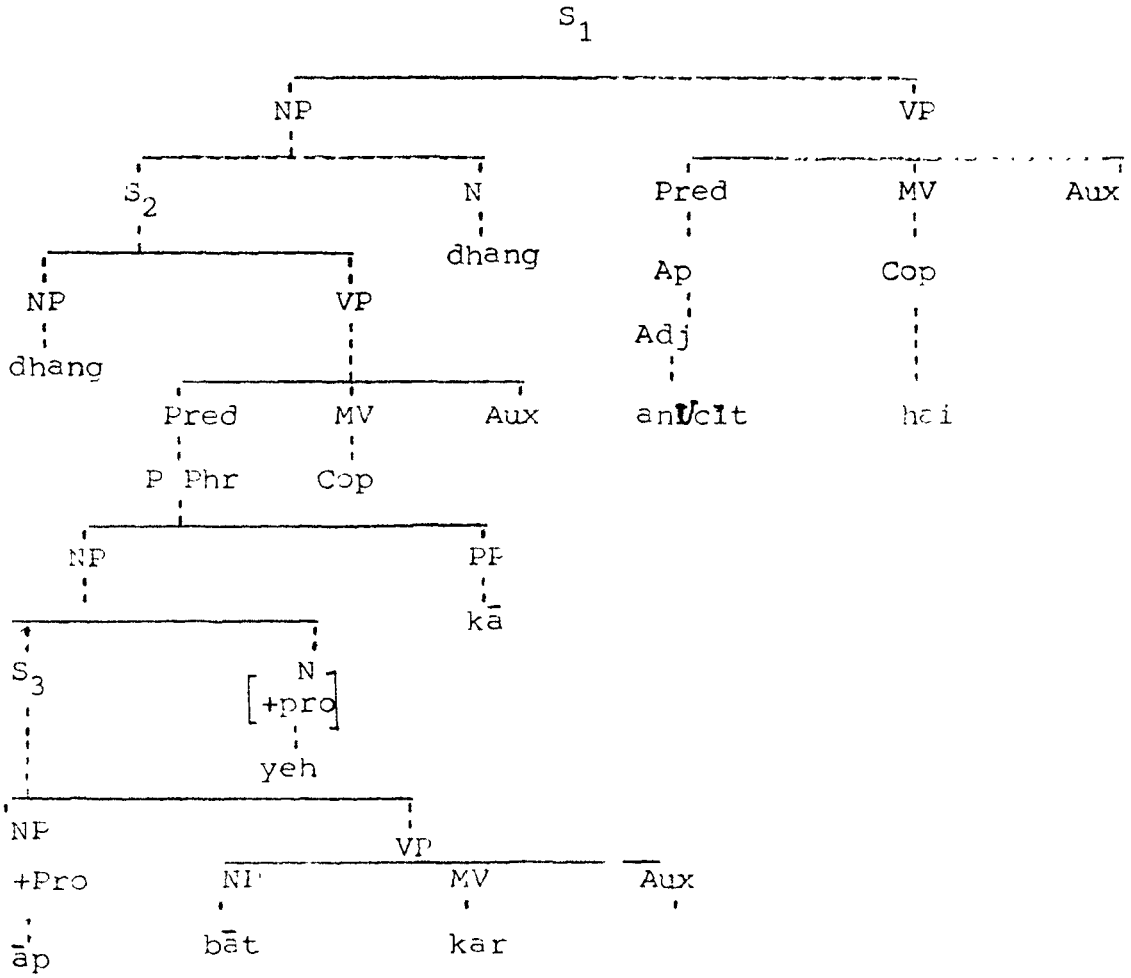
'The way of your talking is improper'.

88. guru ne chātr ko paṛhne ki āgyā di

'The teacher ordered disciple to study'.

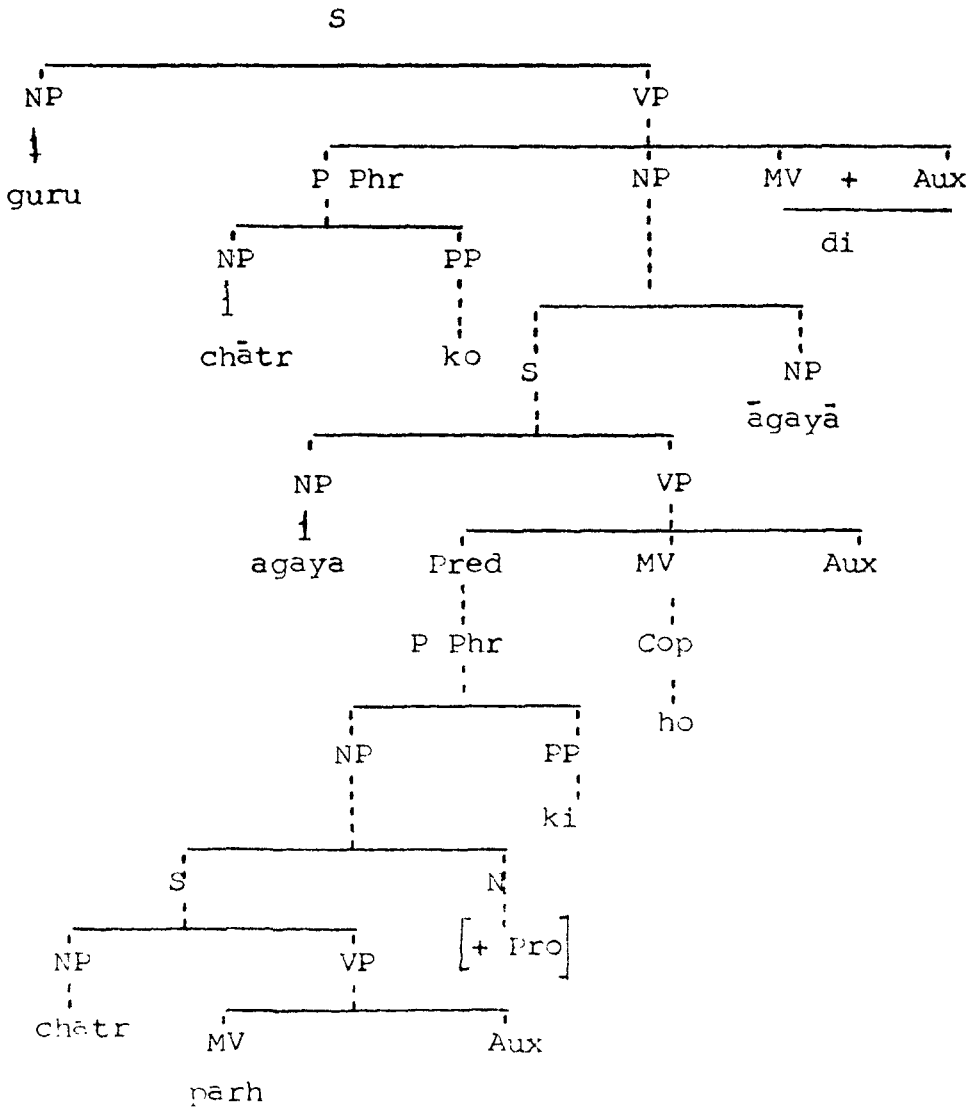
The underlying structure for sentences 87-88 are as follows :

Sentence 87



No operation takes place on S_3 and S_2 cycle. Relative Reduction applies on S_1 cycle yielding yeh kā + dhang anUcIt hai Complementizer ka-na transformation and [+Pro] deletion apply in order to yield āpkā bāt karnā + ka + dhang anUcIt hai Finally phonological interpretation will yield the sentence as above.

Sentence 88



In addition to the above set of rules that derive the sentence (87), Equi-NP deletion may also be applied to the sentence (88).

The ordering of the rules therefore, is :

Relative Reduction

Complementizer placement

Equi-NP deletion

[+ pro] deletion

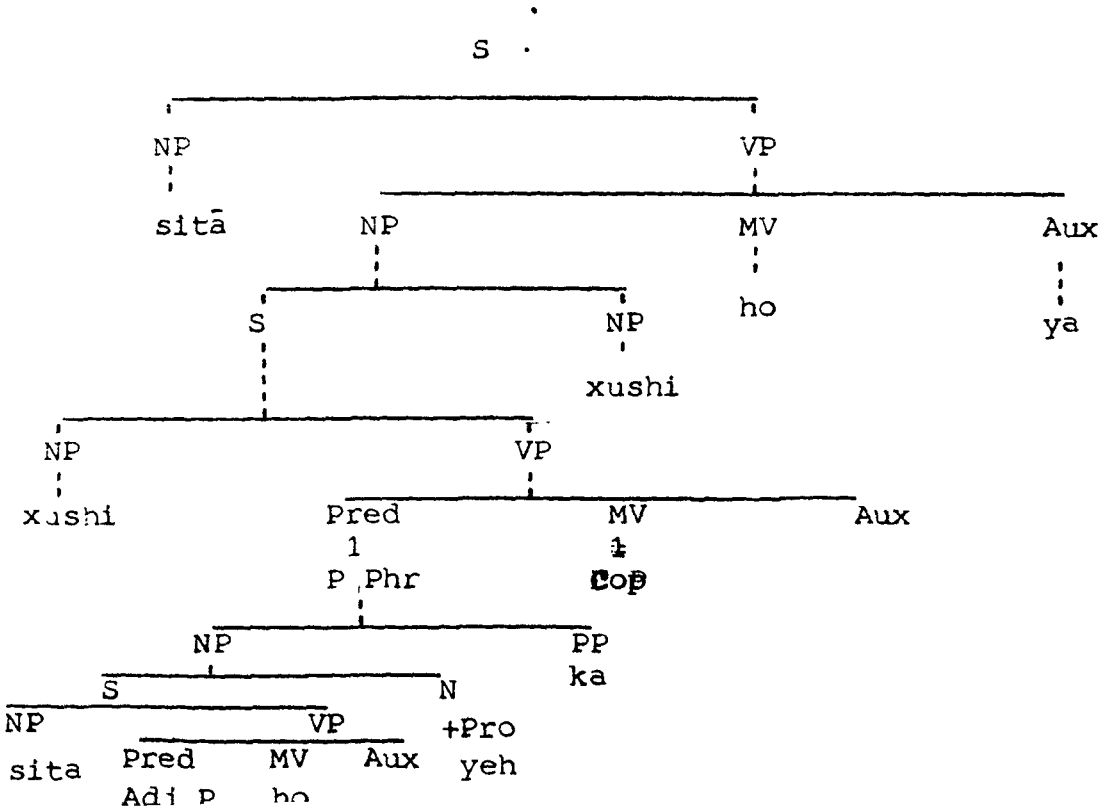
Agreement transformation

ne attachment

The underlying structure of the following sentence is such below :

89. sitā ko apne saphal hone ki xushi hui

'Sita was pleased of her success'.



Relative Reduction applies on S_1 cycle to yield yeh ki xushi. Now complementizer change operates yielding sita S_1 sita NP + ka pas ho na yeh ki xushi hui . At this stage of derivation Reflexivization takes place changing sita kā to apnā . Noted that at this stage of derivation the provided conditions for reflexivization were satisfied due to the identical occurence of sita under the same S node. [+pro] deletion and ko Attachment rules apply yielding (89).

There are, however, cases where the genitive ka is seen to be attached to the object of the complement S. The following are illustrative :

90. ashok ko sIgret kā pinā pasand nahĩ
'Ashok does not like to smoke'.

91. ram ne sharāb kā pinā chor diyā
'Ram gave up drinking of wine'.

92. latā ne cāe kā banānā sikh liyā hai
'Lata has learnt to make tea.

It is difficult to see why underlined phrases such as in 90-92 are different from the phrases such as angrezi ki parhai. It seems to be indicative that the genitive kā in 90-92 is not derived by the same rule of Abstract nominalization that derives angrezi ki parhāi because of nonexistances of abstract noun that correspond to the verb pinā 'drink'. Therefore, it has been

assumed that the genitive postposition ka appeared within the complements such as the ones in 90-92 is derived by a transformation called Genitive postposition transformation.

Other instances of NP-complementation, however, have not been discussed by Mrs. Kachru (1968:69-81)[11]. A few of them are noted below :

I) 93. maĩ ne mālā ko mĪhtrāni samjhā thā
'I thought Mala as sweeper girl'

94. mujh ko yeh buḍḍhā bhĪkāri lagtā hai
'This old man seems to me a beggar'

95. mohan rām ko apnā ustād māntā hai
'Mohan considers Ram to be his teacher'.

96. mujhe yeh naukar cor mālum hotā hai
'This servant seems to me a thief'.

II) 97. mujhe āj latā xush dikhāi paṛi
'I saw Lata happy today'.

98. maĩ ne latā ko xush dekhā
' I saw Lata happy today

99. mujh ko yeh laṛkā bevaquf lagtā hai
'This boy seems non sense to me'.

100. maĩ rām ko bevaquf samajhtā hũ
'I consider Ram stupid'.

101. mujh ko yeh ghar acchā jãcā

'This house appealed to me to be good'.

102. mujh ko ab uske hālāt acche nazar āte hai

'Now he seems well to me'.

III)

103. bacce ne kutte ko marā huā jānā

'Thechild thought of the god as dead'

104. mai ne parandõ ko urtā dekhā

'I saw the birds flying

105. bacce ne ek bIlli mari dekhi

'The child saw a cat dead'.

In addition to infitival and clausal complement in Urdu/Hindi, there are, however, three other distinct sets of inherent properties of complements which have common syntactic, consequences. These are the distinctions in terms of NPs, Adjectives and participles.

In I (93-96) the NPs such as mIhtrāni 'sweeper' bhIkāri 'beggar' ustād 'teacher' and cor 'thief' function as complement of object NPs. In II (97-102), the adjectives such as xush 'happy' bevaquf 'stupid and acchā 'good' are used as object complements. The present and past participles in III (103-105) function as object complements. These participles refer to the derived objects not to the subject of the sentence.

It is to be noted that the sentences such as 93-105 above, are derived by the rule that include the subject Raising rule. By subject Raising the subject of the embedded S is moved up to become the object of the matrix S. The MV of S_2 is deleted in 93-102. In case the derived object requires the postposition ko the case assignment rule i.e. the post cyclic rule that assigns the objective ko takes place independently to account for such constructions discussed under NP complementation. To generate a participle as nominal complement the rule termed as participial transformation operates before the rule of subject raising on 103-105.

In case of adjectives and participles as in 101 and 102 and 105 agreement with the object is obligatory. In case the object is followed by the post position ko the adjective or participle must be in the neutral form. Not all the adjectives require agreement with object. Adjectives that end on-a-agree with the object.

It is noted that if the subject of the participle is identical to the subject or the object of the finite verb, the Equi-NP deletion takes place rather than Subject raising rule. The following are illustrative :

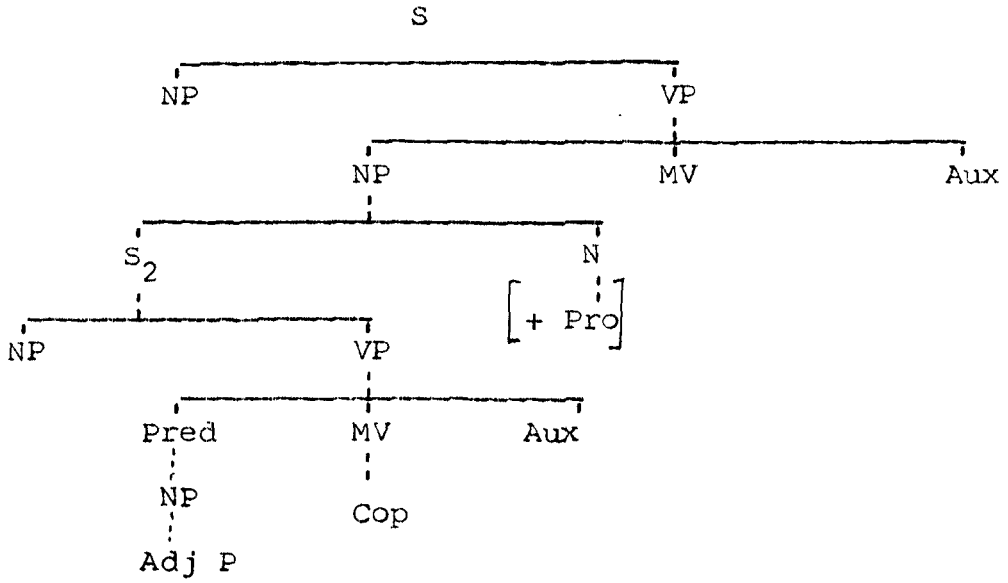
i) laṛkā daurtā huā āyā

The boy came running

ii) pulIs ne cor ko cori karte hue pakṛā

In sentence (i) participle daurtā huā functions as manner adverbial that refers to the subject of the sentences; in (ii) the participle cori karte hue refers to the deep structure object cor 'thief', but functions as verbial complement.

The underlying tree representation of sentence 93-102 is as follows :



The order of the rules applied to the above structure, therefore, is :

(1) Subject Raising rule

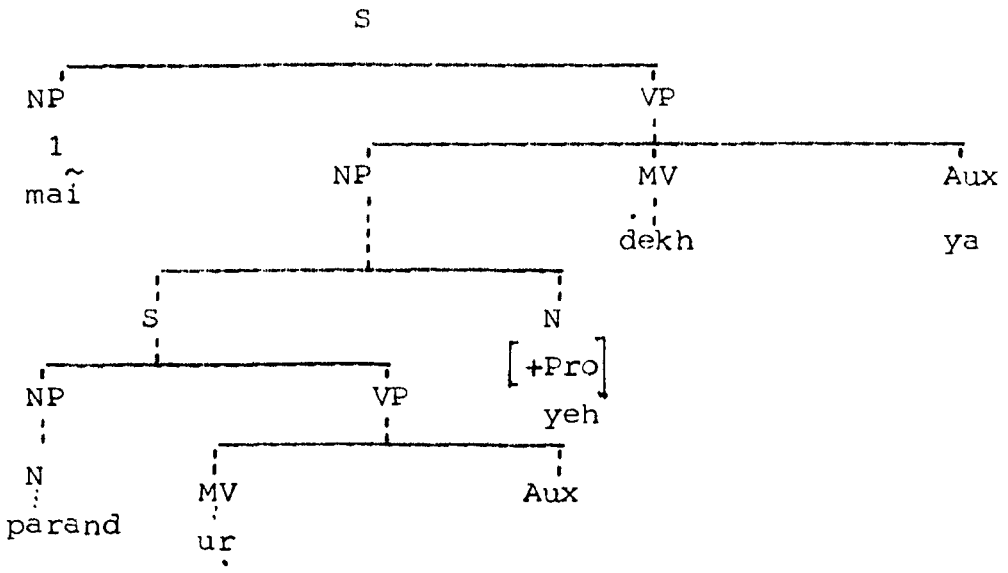
(2) hai of S_2 deletion rule

(3) [+Pro] deletion

(4) Agreement transformation rule

(5) Case assignment transformation rule.

The underlying structure of sentences 103-105 is as below:



The order of the rules, therefore, is :

(1) Participial Formation transformation

(2) Subject Raising

(3) [+Pro] deletion

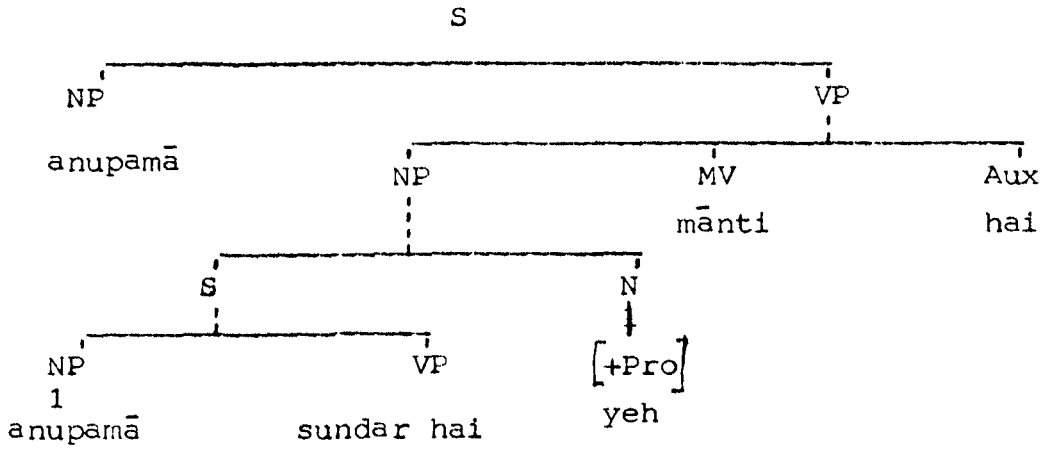
(4) Agreement transformation

(5) Post cyclic Rule

Another transformation that can be involved in the discussion of NP-complementation is reflexivization. The rule of subject raising raises the subject of embedded S in the object position of matrix S to provide proper environment for reflexivization. Reflexivization should operate after subject raising in order to derive sentences such as (106):[12]

106. anupama apne āp ko sundar mānti hai

'Anupama considers herself to be pretty'



The ordering of the rules, therefore, is

Subject Raising

Reflexivization

Mrs. Kachru (1968:59-60) in her analysis of Hindi verbs holds the view that the NP such as apnā bhai 'his brother' is verbial complement rather than nominal complement, in sentence such as below:

107. maĩ rām ko apnā bhāi māntā hũ

'I consider Ram my brother'.

It seems reasonable to note that the NP such as apnā bhāi, in such constructions is best treated as NP complement (see Subbarao 1971)[13]

Verbs such as mānnā 'consider, lagnā 'feel' etc. provide a choice between a clausal complement and a phrasal complement

that results by the application of the subject Raising rule, verbs such as jãcnā 'appeal' dIkhāi paṛnā 'be seen' etc. only allow the operation of the subject Raising e.g.[14];

108. * mujh ko yeh jãcā kI yeh ghora accha tha.

109. * mujh ko dIkhāi paṛā kI latā āj xush thi

Compare the following sentence that provide distinct choices of complements :

110. mujh ko lagtā hai kI laṛkā cālãk hai
'It seems to me that the boy is clever'.

111. mujh ko laṛkā cālãk lagtā hai
'The boy seems clever to me'.

112. maĩ rām ko apnā bhāi māntā hũ
'I consider Ram my brother'.

113. maĩ māntā hũ kI rām merā bhāi hai
'I accept that Ram is my brother'.

In addition to the above discussion with regard to the NP-complementation, sentences such as the following have to be examined to determine if they are at all related to the type of constructions discussed so far:

114. rām angrezi kI lIkhāi sikh rahā hai
'Ram is learning to write English'.

115. latā ne apni paṛhāi choṛdi
'Lata gave up her education'

116. mohan shatranj kā khel jāntā hai

'Mohan knows the game of chess'

117. Usne murɣõ ki laṛāi pasand ki

'He liked the fight of cocks'.

118. mā̃ ko bacce ki maut per/se bahut dukh huā.

'Mother was very sad because of the death of the child'.

In sentences 114-118, the underlined phrases such as angrezi ki lIkhāi, apni paṛhāi etc. function as object complement to be abstract nominal in form. They do seem to be indentical and parallel to the infinitival complement on semantic and syntactic level. The following sentences are compared from the above :

114a. rām angrezi lIkhnā sikh rahā hai

'Ram is learning to write English'.

115a. latā ne apnā paṛhnā chor diyā.

'Lata gave up her education'

116a. mohan shatranj khelnā jāntā hai

'Mohan knows how to play chess'

117. Us ne murɣõ kā laṛnā dekhā

'He saw the cocks fighting'.

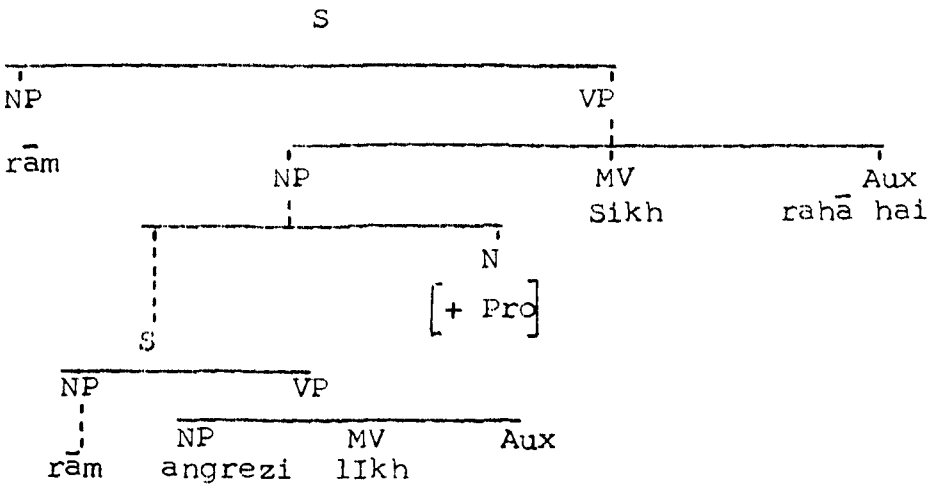
118a. mā̃ ko bacce ke marne par bahut dukh huā.

'Mother was very sad because of the death of the child'

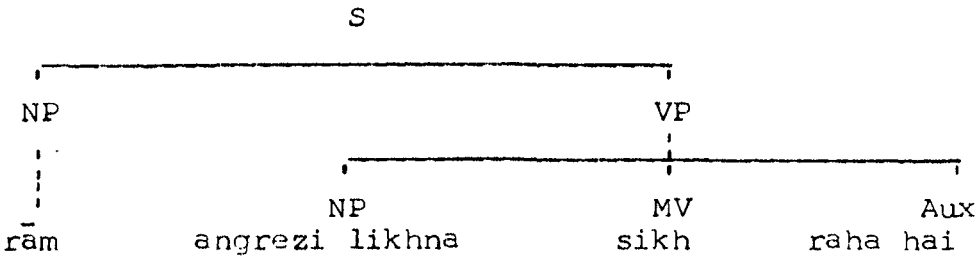
In addition to the same set of rules that have been described so far, there is another rule which might be called as Abstract nominalization transformation. This rule is only applicable to the structures that derive the sentences such as 114-118. Abstract nominalization transformation is a rule which converts the verb of complement into abstract noun. In case the verb is transitive the preceding NP is followed by the ginitive postposition ka (or its inflected form). Not all verbs, however, can be turned into abstract nouns, verb such as lIkhnā 'write' (lIkhai), perhnā 'read(paṛhai), khelnā 'play' (khel), dauṛna 'run' (dauṛ) marnā 'die' (maut), laṛna 'fight' (laṛāi) hārnā 'defeat' (hār), uṛnā 'fly (uṛān), jitnā 'win (jit) etc. can be turned into abstract noun.

An interesting restraint on the use of this transformation is that this can be applied only if there exists an abstract noun that corresponds to the verbs. Another restriction to note is that these abstract nouns can usually be used only in singular.

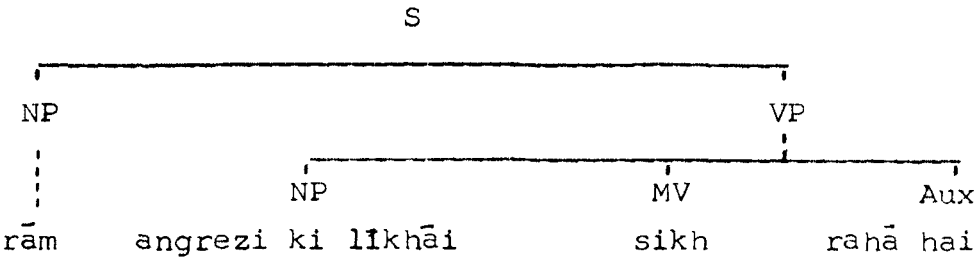
For example, the deep structure of the sentence (114) is such as the following :



By complementizer transformation kā is attached to rām and nā to MV. Equi-NP deletion applies deleting second occurrence of rām kā from S_2. After [+Pro] deletion, an intermediate structure would look on follows :



Now Abstract Nominalization applies changing angrezi lĭkhna to angrezi ki likhai. After all transformation and relevant phonological interpretation, the resulting final form is as below :



It is noted that ka part of infinitive complementizer and genetive ka appear with object N are inflected for gender and number of abstract N

119. mãĩ ne jangli logõ̃ ka nāc dekhā

'I saw the dance of wild men.

120. mãĩ ne baccõ̃ kā khel dekhā

'I saw the game of the children

121. latā ne darzi kɸ kapṛõ ki sIlāi di

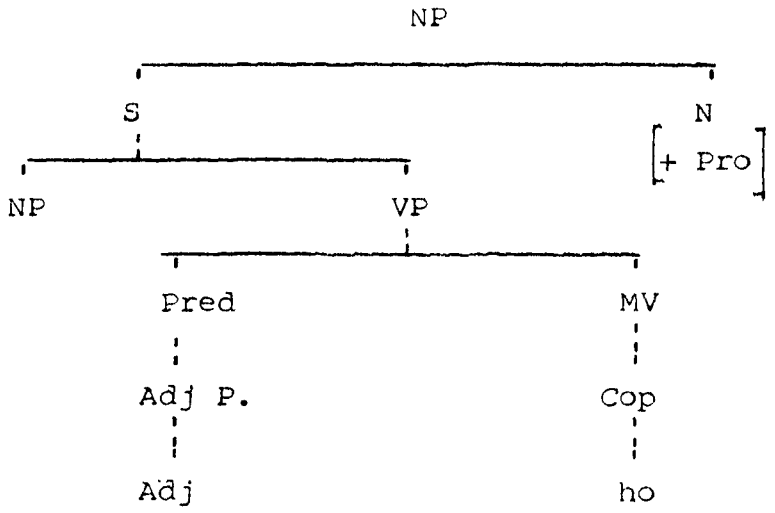
The derivation of abstract noun in Urdu/Hindi may be ambiguous in some contexts. The instances such as that given below are of the type :

122. mujh ko maut se ḍar lagtā hai
'I feel terror from death'.

123. mujh ko bacce kā khel pasand hai
'I like the game of the child'.

This, however, is not clear that abstract N such as maut 'death' in 122, is derived by either simple PS rules or by Abstract nominalization. Similarly the genitive phrase such as bacce ka khel 'game of the child' in 123 is derived by Relativization or Abstract Nominalization.

In addition to the conversion of a vero into abstract noun, there are, however, some adjectives such as bahādur 'brave' sharif 'gentle' lambā 'long' acchā 'good' burā 'bad' etc. that can be turned into corresponding abstract nouns such as bahāduri 'bravery', sharāfat 'gentleness', lambāi 'length', acchāi 'goodness' etc. Not all adjectives can be turned into abstract nouns. As we have mentioned above, the transformation is applicable if there exists an abstract noun that corresponds to the adjective where constituent S, embedded in a NP contains the structure of the type :



The adjective in the embedded sentence is turned into abstract noun by the same Abstract nominalization that converts verb into abstract noun. Subsequently, the MV ho is obligatorily deleted by deletion rule.

It has been observed that the abstract nouns that function as nominal complements are usually derived from adjectives. Not all the abstract nouns are derived by this process, abstract noun preceded by genitive ka, in most of the constructions can be derived by 'Abstract Nominalization transformation.' The sentences that contain abstract nouns derived from adjectives are such as the following :

124. sab ko bacce ki aqlmandi par tājjub huā.
'All were surprised because of the child intelligence.

125. bacce ki bahāduri ne dhum macā di.
'The bravery of child became well known'.

126. mã̃ bacce ki bimāri se pareshān hai

'Mother is sad because of the illness of her child'.

127. mujh ko Is bacce ki safāi pasand hai

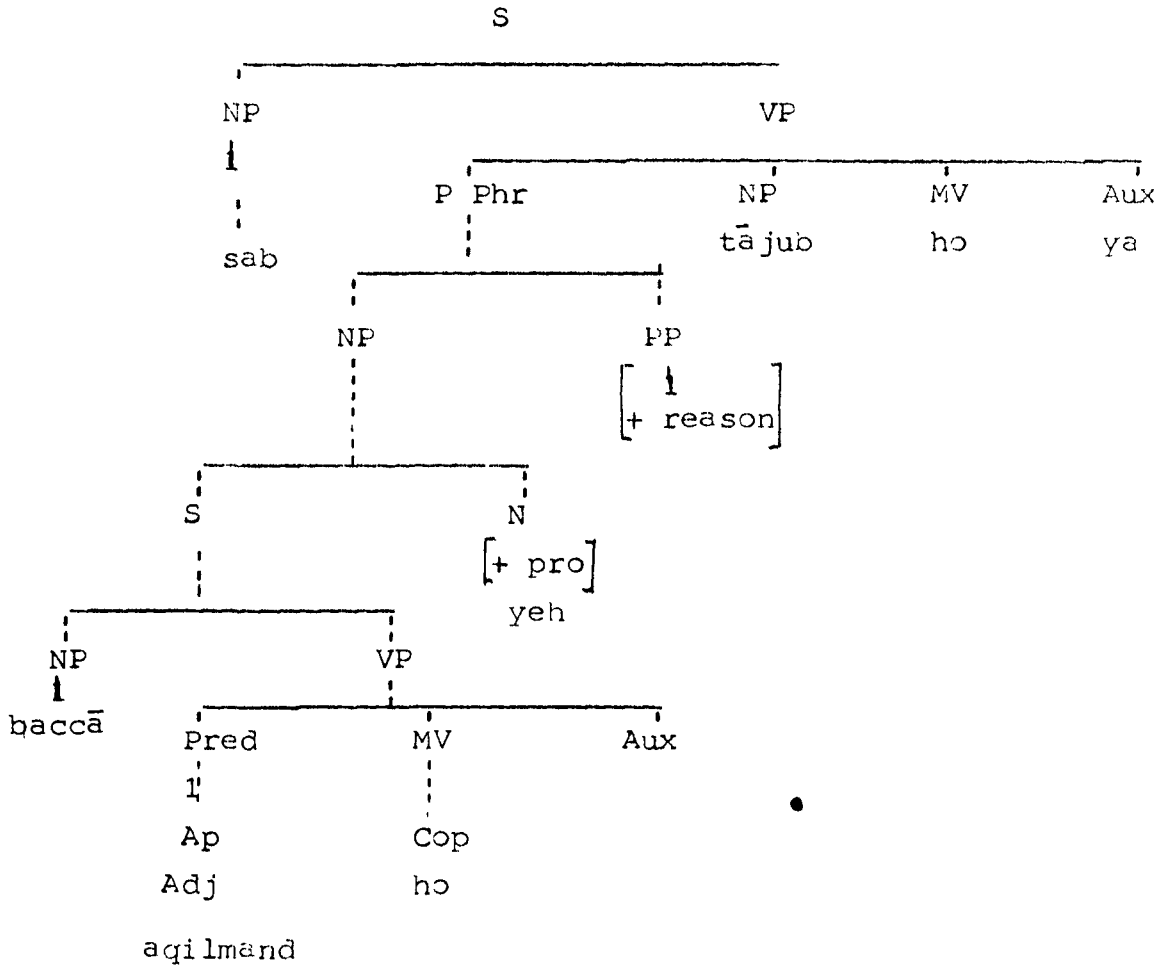
'I like cleanness of this child'.

128. naukar ne kamre ki safāi ki

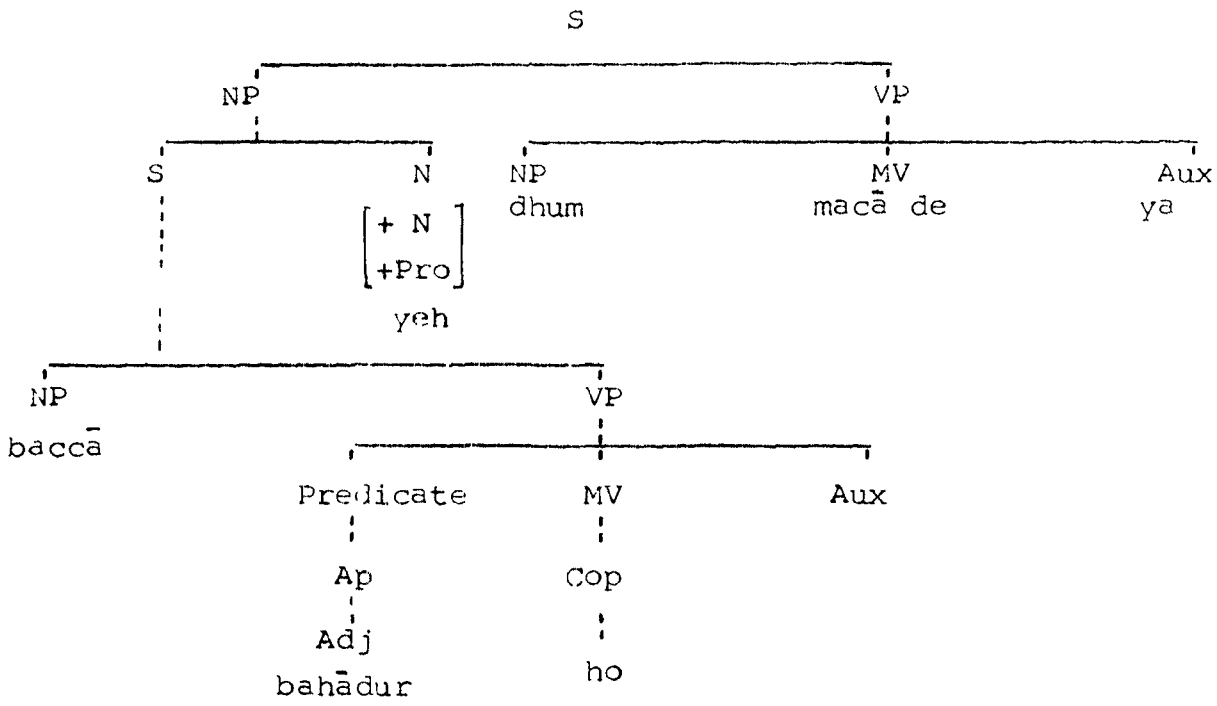
'The servant made the room clean'.

. The underlying tree representation of sentences 124-126 are as follows :

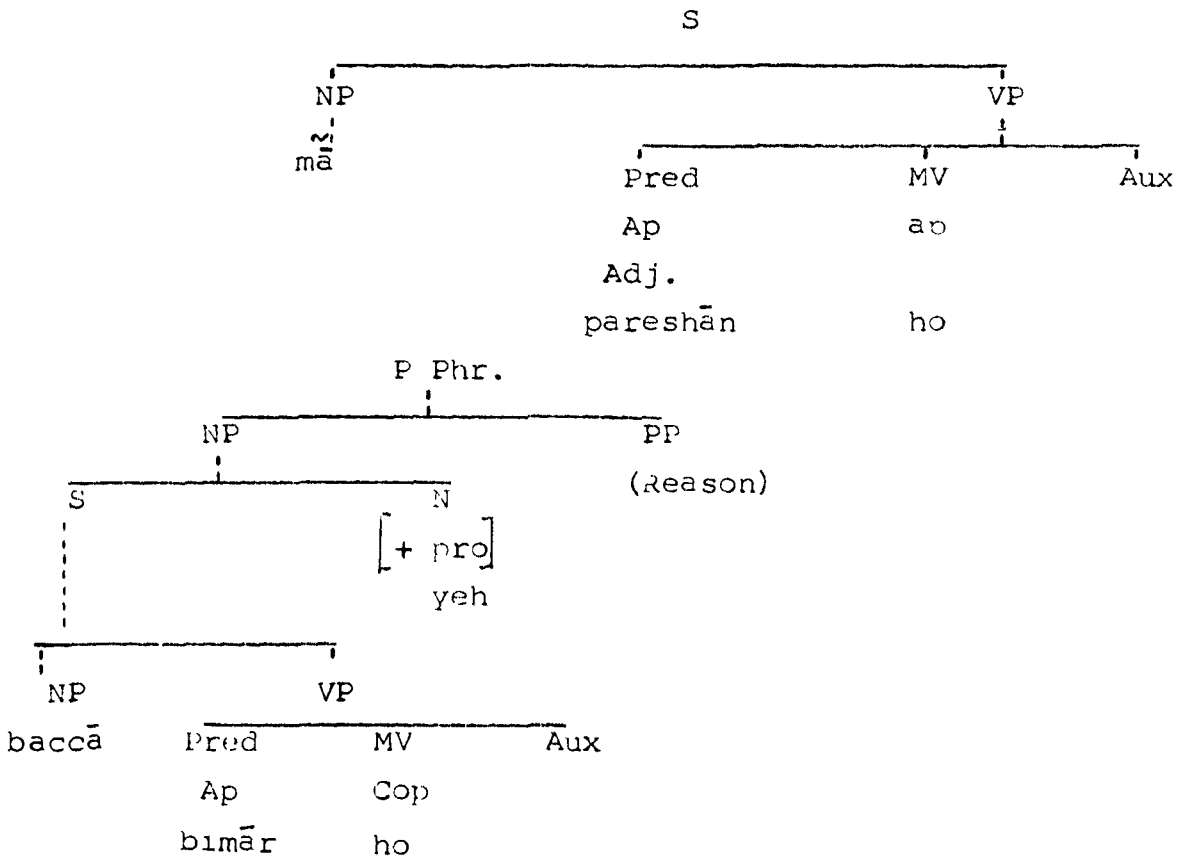
Sentence 124



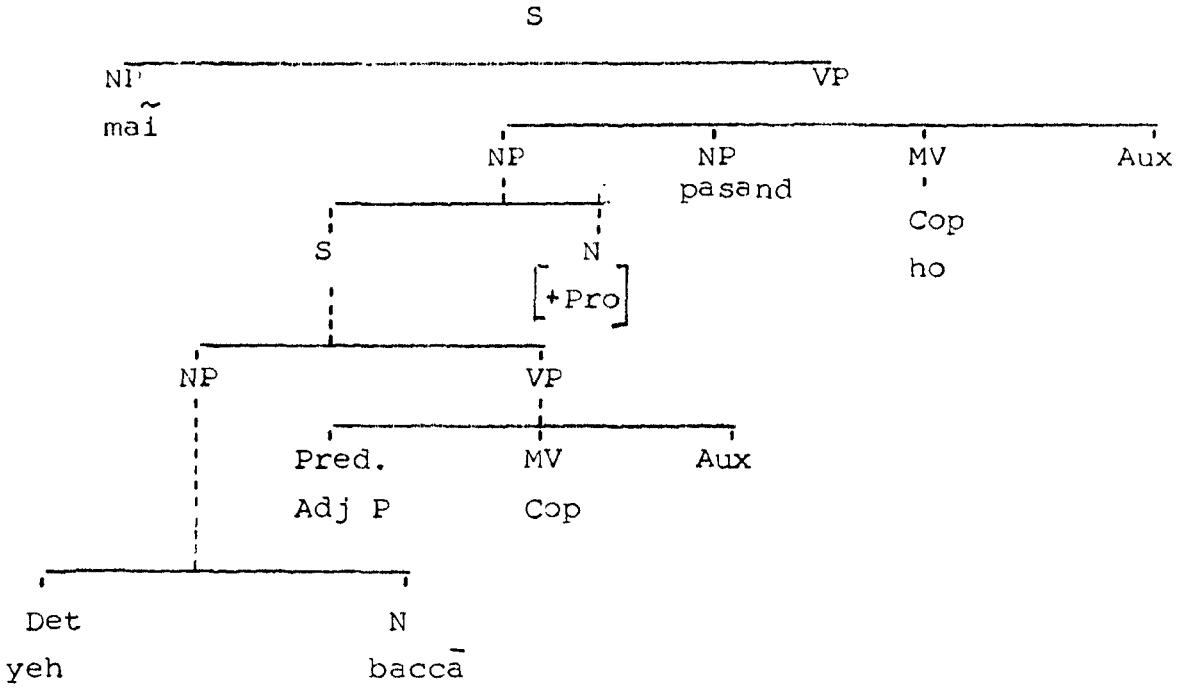
Sentence 125



Sentence 126



Sentence 127



The following rules apply in order to derive the NP-complements :

1. Complementizer transformation
2. [+ Pro] deletion.
3. Abstract Nominalization
4. MV OF S_2 deletion.

As regards the set of rules proposed in this study, it has been assumed that kā part of infinitive complementizer is deleted by the rule that deletes the identical noun phrase and na by Abstract nominalization transformation. This assumption is neither justified nor convincing. Infinitive complementizer may and sometimes must be deleted either partially or completely by a separate transformation called complementizer deletion

transformation. This transformation is an optional transformation which can delete clause complementizer and either first or second or both of the elements of infinitive complementizer.

In the above illustrations, however, no further mention of complementizer deletion has been made. We shall assume that this rule applies whenever the Equi-NP deletion or abstract nominalization or both of the rules apply. Some instances of complementizer deletion are provided by the following sentences.

129. sunā hai āj Indrāji yahā̃ ā rahi hai̇̃
'It is heard that Indraji is coming here today'

130. latā ghar jānā cāhti hai
'Lata wants to go home'.

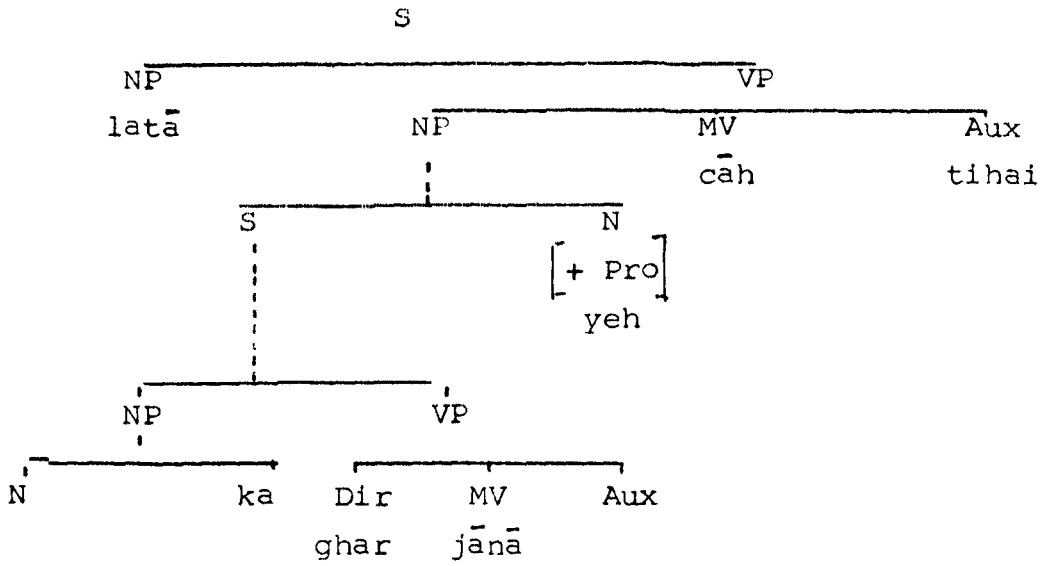
131. ram angrezi ki lIkhāi jāntā hai
'Ram knows to write English'.

132. jantā ne Indrāji ki jit par xushi manāi
'People felt pleasure on the success of Indiraji'

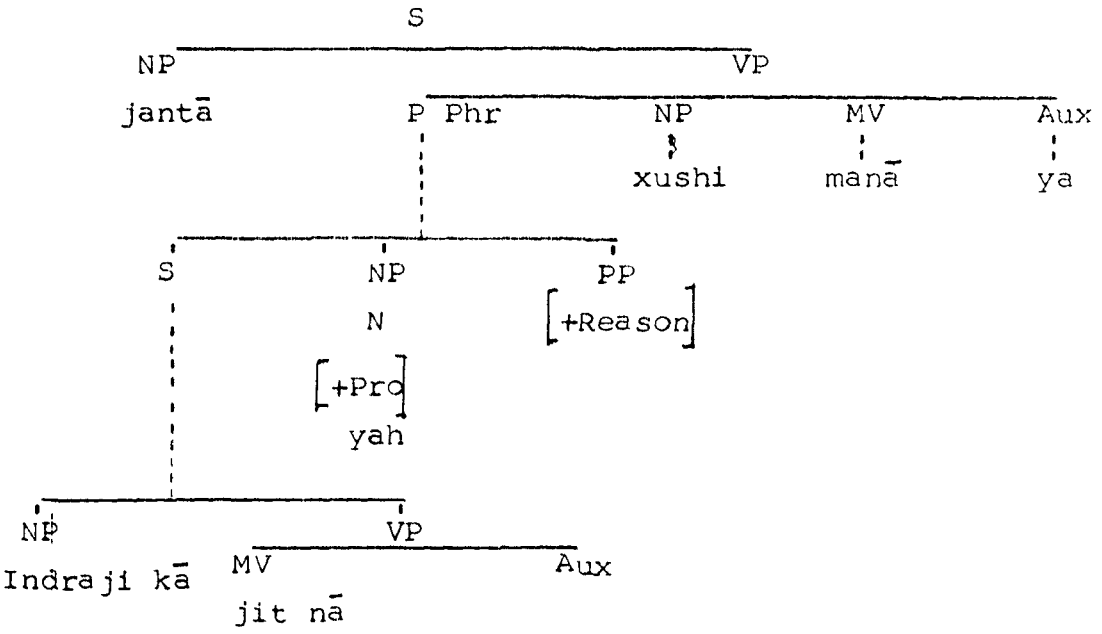
In sentence 129, clause complementizer kI is dropped, in 130, ka part of infinitive complementizer is dropped; in 131, kā and nā both elements of infinitive complementizer are dropped and in 132, only nā part of infinitival complementizer is dropped.

An intermediate structure of 130 that is yielded by

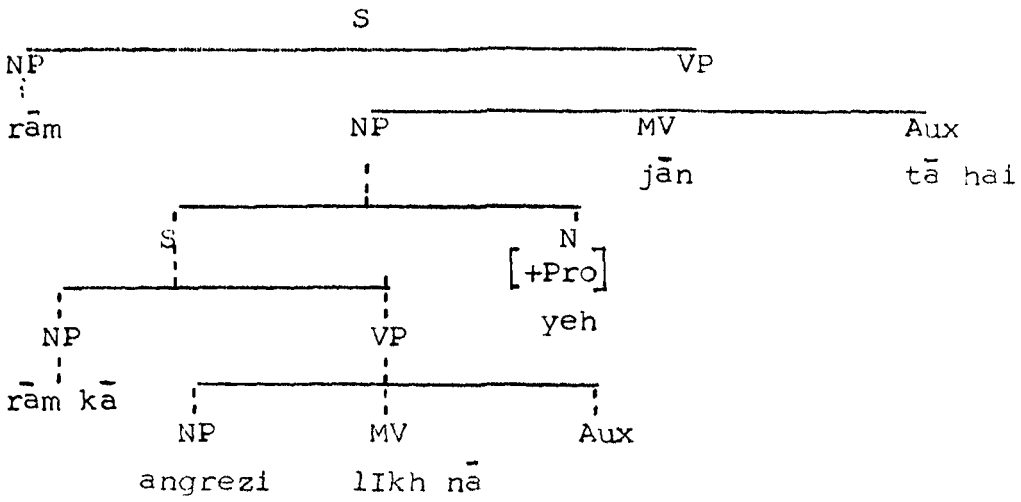
Equi-NP deletion rule, requires the application of complementizer deletion rule. Consider the following :



The structure such as Indraji ki jit in 132, is derived by Abstract nominalization transformation (changing V into Abs N) from the structure that results from the application of the complementizer placement rule :



Other structure such as 131 has been derived by Equi-NP deletion, complementizer deletion and abstract nominalization from the following :



It seems reasonable to maintain that the phrases such as Indrāji ki hār (NP + ka + Abstract N) and angrezi ki paṛhāi (Object N +ka + Abstract N) could only be derived by Abstract Nominalization. Where as this rule is applicable gerundial transformation i.e. complementizer transformation is supposed to make unnecessary. The F position ka may be attached to subject N or object N of the complement at the stage of conversion of the verb into abstract noun. Similarly, the phrases such as bacce ki bahāduri and bacce ki aqalmandi etc. are derived by the same abstract nominalization transformation that derives the abstract noun which semantically correspond to the verb and adjective as well.

NOTES & REFERENCES

1. Kachru, Y. (1968:70) 'Studies in a Transformational Gr. of Hindi'

2. Kachru (1968:69) has given a long list of verbs that take nominal complements.

3. Kachru (1980:30) 'Aspects of Hindi Gr.'

4. Kachru (1968:73) 'Studies in a Transformational Gr. of Hindi'. and (1980:38) 'Aspects of Hindi Gr.'

5.
5. Kachru (1968:64-81) 'Studies in a Transformational Gr.of Hindi'.

6. Kachru (1980:143) 'Aspects of Hindi Gr.'

7. Kachru (1968:73) ' Studies in a Transformational Gr. of Hindi'

8. Kachru (1980:85) 'Aspects of Hindi Gr.'

9. Kachru (1968:55) 'Studies in a Transformational Gr. of Hindi and (1980:63) 'Aspects of Hindi Gr.'

10. Kachru (1971:89) 'Papers on Hindi syntax, vol-I, No. 2 and (1980:63) 'Aspects of Hindi Gr.'

11. Kachru (1968:69-81) 'Studies in a Transformational Gr. of Hindi' and (1980:94) 'Aspects of Hindi Gr.'

12. Subbarao, K.V. (1971:201) 'A note on Reflexivization in Hindi' 'Papers on Hindi syntax' vol-I, No. 2

13. Subbarao (1971:201) 'A note on Reflexivization in Hindi' 'Paper on Hindi syntax vol-I, No. 2

14. Kachru (1971:91) 'Causative sentences in Hindi, Revisited : Papers on syntax vol-I No. 2

CHAPTER-V

CAUSATIVIZATION

This chapter concentrates on the process of causativization. This process, however, is unique only in this respect that the sentences embedded in a NP, always appear inside the NP which is dominated by the VP node in the deep structure.

In the present discussion, an attempt is made to study the nature of causative rule in Urdu/Hindi and its interaction with other rules. In the first few lines of this chapter, studies and proposals relevant to a present discussion of causativization in Urdu/Hindi are to be reviewed. Subsequently, an alternative analysis that is concerned with the phenomena of causativization with regard to semantic and syntactic accuracy will be accounted.

Causative Constructions

The earliest work with regard to the study of causative constructions in Hindi, in the frame work of Generative Grammar is that of Yamuna Kachru (1965, 1966). She adopts the causative approach proposed by Lakoff (1965) for the analysis of Hindi causative sentences[1]. Mrs. Kachru (1965) maintains in her proposal, in order to give an adequate structural representation

to the roles that noun phrases play in the causative constructions and to the interaction of these role in non-causal, direct causal and indirect causal sentences. This relationship can be exhibited in the following way :

Intransitive

(1)	Non Causal		Agent	(Surface Agent)
(2)	Direct Causal :	Agent	Object	(recepient)
(3)	Indirect Causal :	Initiator Agent	Mediator Object	(recepient)

Transitive

(4)	Non Causal		Agent	Object
(5)	Direct Causal:	Agent	Recepient	Object
(6)	Indirect Causal :	Initiator Agent	Mediator Recepient	Object

(1)			bacca	soya
(2)		lata ne	bacce ko	sulaya
(3)	ji ji ne	lata se	bacce ko	sulvaya
(4)			ram ne	am khaya
(5)		lila ne	ram ko	am khilaya
(6)	lata ne	lila se	ram ko	am khilvaya

The agent of the intransitive and transitive non-causal becomes recipient of direct and indirect causal and the Agent of direct causal becomes mediator of the indirect causal.

It is clear from the above examination that the agent, mediator and recipient interact in a systematic way. According to her, this fact may be emerged from an examination of a process of successive embedding which takes place in the formation of causatives. She also maintains that causatives are instances of verbal complementation and that there is a causative transformation that takes place recursively. The following sentences, seem to be indicative, in terms of their relationship between them :

7. maĩ ne angur khāye
   I ate grapes

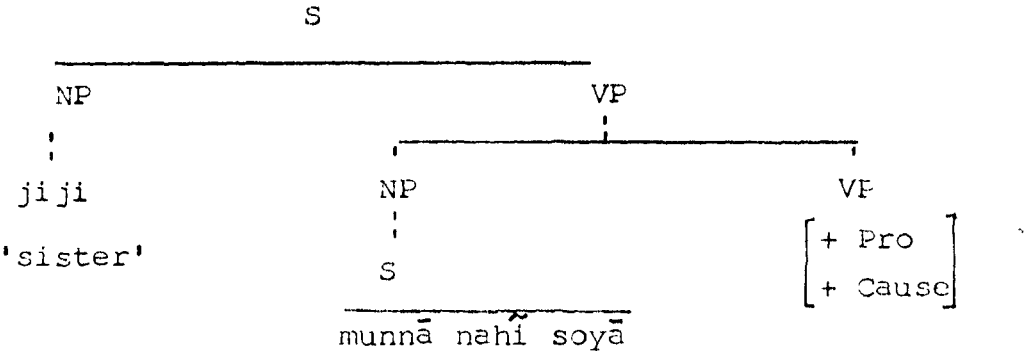
8. āp ne mujhko angur khĩlāye
   You fed me grapes

9. rām ne āpse mujhe angur khĩlvāye
   Ram made you feed me grapes

The claim that the causative sentences involve the process of embedding and the causativization in Hindi is a prelexical rule, is supported by most of the transformationalists, as she proposes. Kleiman supported the suggestion of Kachru (1968, 1971) and Subharao (1967) that in order to block the derivation where apnā is coreferential with bacca causativization must be ordered before Reflexivization in (10)[2].

10. latā ne bacce ko apnā koṭ pahnāyā
    Lata made the boy wear her coat'.

Mrs. Kachru (1971) points out that the inner most sentence of a causative sentence in Hindi can not be negative. That is, the underlying sentences such as



does not result in a grammatical causative sentence in Hindi, only because of the prelexical transformation of causative rule together with the fact that there is no lexical verb in Hindi to replace (X (X not sleep) caus).

It is worth claiming at this stage that the sentences such as (A) are grammatical or not. The sentences of the type usually are found to prevail in the language. It is not correct that the sentences such as ji ji ne munne ko nahi sulaya are ungrammatical only because of inadequacy of prelexical rule of causativization that takes place in order to derive the structure of causative sentences. This aspect of causative constructions deserve to be further investigated. Mrs. Kachru

claims that causatives are instances of verb phrase complementation. If we examine the structure (A), there is a clear cut contradiction between her proposal and structure (A). In the structure (A), the inner most sentence occurs directly under immediate domination of NP which does not seem to be functioning as verb phrase complement.

She (1971) proposes the following rules which involve in the process of causative embedding : a Prelexical transformation that via Predicate Raising moves the verb of the embedded S to attach to the causative verb of the matrix sentence, a Subject raising rule that raises the NPs of the embedded sentences to the object position of the matrix S and case marking rules which assign proper case marking to NPs of the sentence.

A.B. Klieman (1971) to a large extent seems to be a true follower and supporter of Yamuna Kachru. She supports the claim that the causative sentences involve embedding and the causative rule applies recursively.

Causitivization must be ordered not only before reflexivization, but before the cycle as well. She gave nothing to us except the views and proposals presented by Kachru. Only one comment in her discussion which goes against the proposals of Kachru, is noteworthy. She states in her comment that the status of the type of complementation proposed

by Yamuna Kachru for the derivation of causitive sentence is doubtful. She is entirely against the claim of Kachru that causitives are instances of verb phrase complementation. K.V.Subbarao (1967, 1971) is one of the brilliant scholar of Hindi linguistics. It would not be wrong to state that his valuable suggestions and proposals lead to the researchers in order to derive the structure of numerous sentences in Urdu/ Hindi, in Generative Transformational frame work. Dr. Subbarao has thorough grip on the cyclic nature of the transformational rules as well as reflexivization and pronominalization with regard to discuss the structure of sentences in Hindi. He maintained the valuable comments arguing with the proposals of Kachru and Kleiman with regard to the discussion of causatives in Hindi[3]. He rejects the view of Kachru and Kleiman and suggests that the inner most VP node together with the S_2 node are not deleted immediately after the prelexical rule of causativization. S_2 node is not erased before any of the cyclic rule carries out. If we delete the VP and subsequently the S_2 node, the remaining structure, leaves some major problems as residues. He points out that the rule of reflexivization neither invalidates the claim nor it provides the evidence to support the proposal that causativization is a prelexical rule. According to him, this aspect deserves to be investigated and more work is to be done on the interaction of reflexivization and causativization.

All of the proposals discussed so far, support the claim that the causative sentences in Urdu/Hindi involve the process of embedding. We will now study briefly proposals which deal with the causatives in Hindi as simple sentences and support the claim that the causativization in Hindi do not involve the process of embedding.

Bahl (1967) has maintained that causatives in Hindi are simple sentences having no embeddings[4]. He analysed the causatives in terms of context sensative rule and of strict sub-categorization of nouns. He concentrated to account for co-occurrence restrictions between noun and causal in the expansion of NP, and VP was developed into +causal morphem. His approach results to delimit the class of verbs and permits the causals in the expansion of VP. He also serves to list the forms which appear with causals morphenes through expansion rules. He failed to maintain the correct output of causals and further more, the validity of context sensitive rules of expansion was not accepted by scholars.

Balchandran, L.B. (1973) also claimed that causative sentences are simple sentences with no embeddings. He analysis is based on the well known theory of C.Filmore as 'Case Grammar.' In the case grammar, the difference between simple and causative constructions like :

11. bacca soya ' boy slept'

and

12. mã̃ ne naukar se bacce ko sulvāya

'Mother made the boy sleep'

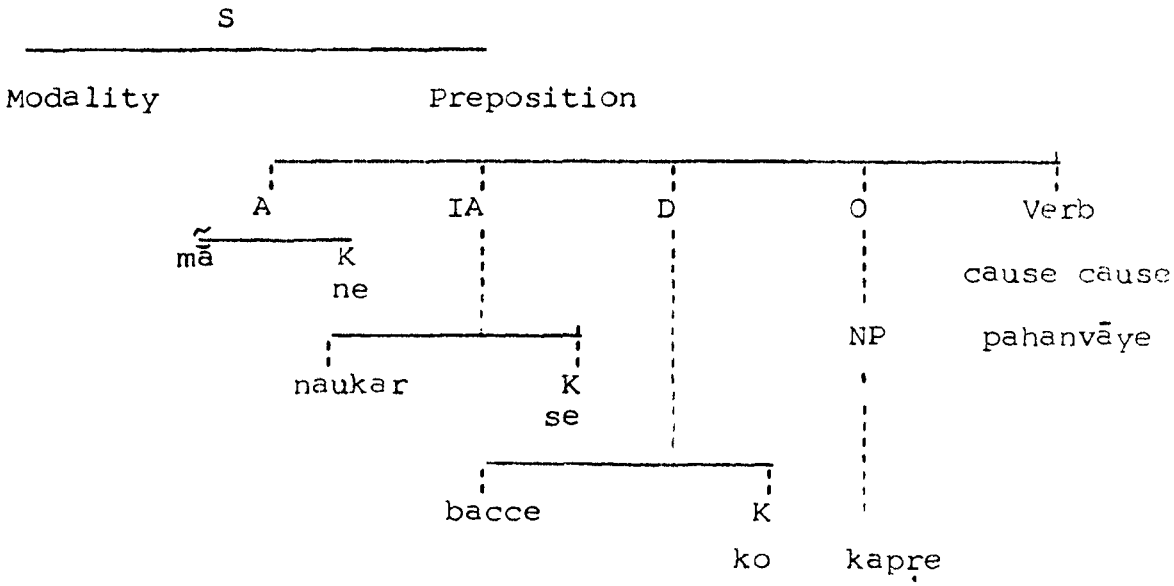
is explained in terms of the number of case relationships that are involved in each sentence.

In the frame work of case grammar, causative construction are analysed as simple sentences. For example, a sentence like :

13. mã̃ ne naukar se bacce ko kapṛe pahanvāye

'Mother made the servant dress the boy'.

has the underlying structure[5].



(K stands for 'case')

Balchandran presents a few arguments against the proposal of Mrs. Kachru (1965, 1966) that causative sentences in Hindi involve embeddings. Balchandran attempted to show numerous constraints that have to be specified for the structure of the embedded S, in order to present correct derivations. She has proposed such restrictions merely in support of her claim that causative sentences in Hindi are like simple sentences with no embeddings. One of these arguments, she states, is the participial manner adverbials can occur with no causals but when embedded under a causative node, the non-causals or the VP of embedded S can not be modified by such adverbials, and these adverbials correspond to the suoject of higher S, e.g.

14. munnā rote rote soyā 'The child fell asleep crying'
15. mā̃ ne bacce ko rote rote sulāya
'Mother put the child to sleep crying'.

The adverbial rote rote 'crying' refers back to mā̃ 'mother' not to baccā 'child'.

Similarly, in the case of indirect causative constructions such adverbials correspond to the subject of the top most sentences, e.g.

16. mā̃ ne ji ji se munne ko hãste hãste sulvāya
'Mother, laughingly, made elder sister make the child sleep'.

17. mā ne jān bujh kar ji ji se munne ko sulvāya

'Mother, knowingly, made the elder sister put the child to sleep'.

This claim is not satisfactory, if we examine the examples such as the following :

18. latā ne lilā se Shilā ko sote hue jagvāya

19. shyām ne rām se tote ko urte hue marvāya

In the sentence such as 18-19, participial sote hue and urte hue do not refer to latā and shyām but correspond to sheela and totā 'parrot' respectively.

The claim is satisfied and absolutely correct if we take up the example 17, in which the adverbial as V-kar phrase, refers back only to mā̃ 'mother' not to bacca 'child'. In second argument, similar type of restriction have to be specified with regard to the operation of Reflexive rule. Sne further maintains that the rule of reflexivization will not operate in embedded sentence, if we adopt the causative approach. Since the T.Rules are applied cyclically, the Reflexive rule must operate before causative rule. For example,a sentence such as below is noted :

20. mā̃ ne bacce ko apne kapre pahnāye

She states that apne clearly refers to bacca 'child'

and the reflexive rule is not needed to operate in the embedded sentence. In the case, if apna refers to mã̃ 'mother', there is no subject NP in the embedded sentence, which is coreferential with the possessive NP to provide the proper environment for the operation of reflexive rule.

Mrs. Kachru (1965, 1966) and Subbarao (1967) suggested that the causative rule is made to precede the reflexive rule. But according to Balchandran, it is not a satisfactory solution. Subbarao (1971) further states, that if the proposal of Kleiman (1971) and Kachru (1971) such as that causitive rule is a prelexical transformation, is accepted, in the sentence such as (20) apna would uniquely refer to the instigator of the action, that is mã̃ in this sentence and not to baccã. According to Kachru (1968:26) and Subbarao (1971) where apne refers to mã̃, it has been suggested that in order to block the derivation where apnã refers to baccã causative rule is made to precede the reflexivization.[6]

The claim that the causative rule is a pre lexical rule, and it is made to precede other T.Rules, can not be opposed. The causative rule operates not only before reflexive rule, but before the cycle as well. After causativization, Relative Reduction is ordered, thus the S_3 node and subsequently the S_2 node are erased and the phrase mã̃ ke kapre 'clothes of mother' and the subject NP of the sentence 20,

such as mã̃ 'mother' are dominated by the same S node. This creates the proper environment to operate the reflexive rule.

The third argument in which Balchandran supports the claim that causatives do not involve embedding, is purely semantic. It is wrong to say that causative implies the non causative sentence. For example, the following sentence is grammatical:

21. mã̃ ne bacce ko sulāya par voh nahī̃ soyā
'Mother put the child to sleep but he did not sleep'

Since the non-causal part of the sentence is negating which is affirmed by causal verb.

This, however, is not acceptable that such sentences whether in imperfective or in perfective are grammatical. The sentences, according to Kachru may be grammatical in progressive and future, as they involve action in progress and prediction respectively.

22. mã̃ bacce ko sulā rahi hai par voh so nahi ro rahā hai
'Mother is putting the child to sleep but he is not sleeping'.

In her final argument, Balchandra holds the view that the following sentence :

23. maī̃ ne larke ko daurāyā 'I made the boy run'

is a grammatical causative sentence, only because of the deep structure case of larka (agent) does not change in the sentence and larka 'boy' in the surface structure is marked as object. The rule of Adjectivization does not operate to this sentence and yield an ungrammatical phrase.

24.* mere daurāyā huā laṛkā 'The boy made to run by me' because laṛkā does not change its agentive function in the causative sentence.

It is not correct that adjectivization rules does not operate only because of the deep structure case of agent.

There are, however, some cases in which it does not operate but in some other context it does operate[7]. For example, some grammatical phrases are noted below :

25. mera paṛhāyā huā shāgIrd
'The pupil who was taught by me'.

26. mere darāyā hua bacca 'The child whom I made nervous'.

27. mā̃ ka sulāya hua bacca 'The child made to sleep by mother'.

Balchandran sets up an underlying stem for each verb, from which direct and indirect causative stems can be derived through morphophonemic rules. But in the frame of generative grammar, three separate stems of the verbs are established in

the lexicon.

It is clear from an examination of above discussion that the arguments presented to support the claim that causative sentences do not have embedding are not entirely convincing and satisfactory.

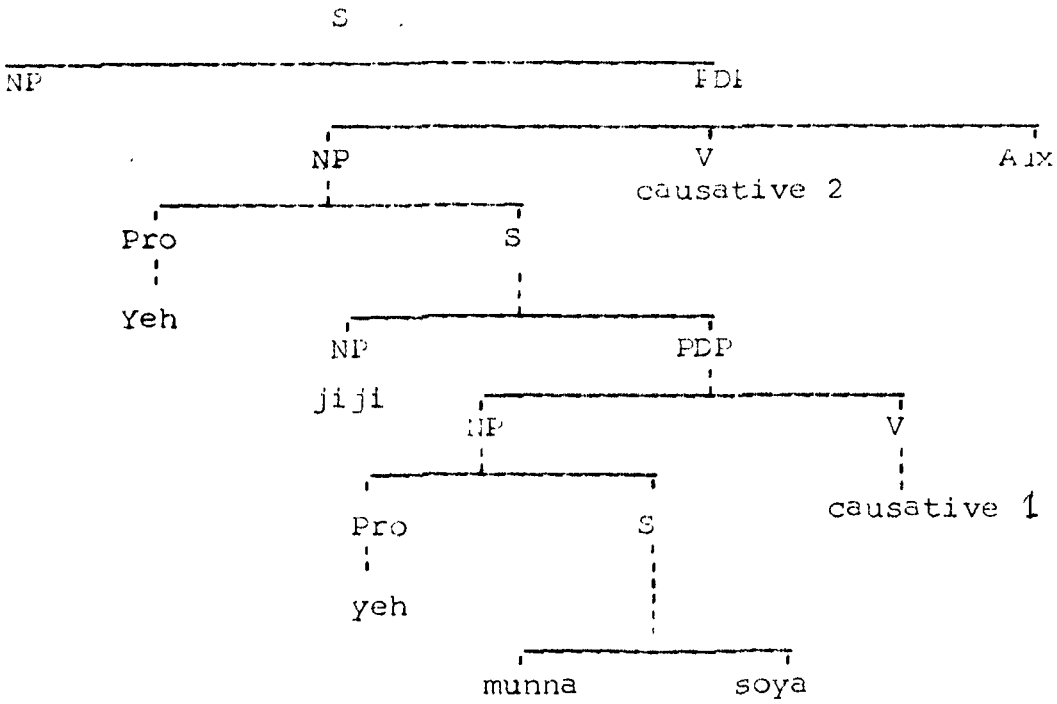
Krishnamurti (1970) discusses two of the arguments presented by Balchandran restrictions on participial manner adverbials and semantic structure of causative verbs. His discussion with regerd to the discussion of manner adverbials are not satisfied and convincing. His observations about the semantic structure of causative verbs are very interesting, even though they are not justified and entirely correct. They are turned out and not discussed in the present study[8].

Sinha (1970) adopts the approach that Lakoff (1965) has proposed, in his treatment of Hindi causatives[9]. According to him, a constituent is embedded under NP in apposition to pronominal yeh, similar to other nominalized sentences that occur in the deep structure in apposition to yeh or abstract N. According to him a sentence such as :

28. mã̃ ne ji ji se munne ko sulvāya

'Mother made the elder sister put the child to bed'

is derived from the underlying form.



The transformations that are needed to derive the causative sentence are in the following order :

1. zero complementizer transformation
2. yeh placement or subject raising which creates the intermediate structure upon which the case marking transformation can apply.
3. Causative transformation

Kliemen (1971) commenting the proposal of Sinha, seems absolutely to be correct that Sinha is not explicit about the ordering of the transformations he proposes. Sinha does not discusses the cyclic nature of the T.Rules as to whether the

causativization is a last cyclical or post cyclical rule. Sinha could not justify the zero complementizer.

The treatment of zero complemention in order to derive causative sentence does not seem to be satisfactory. This complementizer cannot occur with causal verbs as they are exceptional in their behaviour and thus contrast with other verbs that take complex sentential objects (Klieman 1971).

Professor J.D.Singh (1975:170-173) reviewing Balachandran's case grammar of Hindi rejected the view held by her that causative sentences are as simple sentences and they do not involve embedding. He also maintains that the number of agents in a causative sentence is two or three as the case may be[10].

The restrictions under the causative analysis with regard to the occurrence of adverbial rote rote and the operation of the reflexivization transformation as she proposes, are supported by him. Professor Singh does not consider the verbs such as pIs 'grind', chor̤ 'make free', kat̤ 'cut' etc. as direct causal as she proposes. Instead he treats them as simple transitive form and basic stem as well.

In addition to the discussion held so far, now we will study in the following certain disputable problems which come across in the derivation of causative sentences.

The status of the type of complementation in a causative sentence, which, according to Prof. Kachru has been claimed as VP-Comp. is probably false. It should be noticed that she provides no syntactic arguments in support of her claim.

The basic objection to this analysis is that the provided conditions for VP-complementation are not satisfactorily met. The rule of Equi-NP deletion which obligatorily operates to derive VP-complement is blocked here and it can not be applied to the structure that yield causal sentence because the structural description of Equi-NP deletion is not met.

Another transformation that is crucial in the analysis of causatives is subject raising. This of course is correct that the rule of subject raising provides the proper environment for Reflexivization or it turns up the subject of embedded S to become the object of matrix S. Sentences such as below are the result of above transformations.

29. anupamā apne āp ko sundar mantī hai
'Anupma considers herself to be pretty'.

30. kuch log beimāni ko gunāh mānte haĩ
'Some people consider cheating a crime'

Reflexivization is ordered after subject raising in order to derive the sentences such as 29. On the other hand

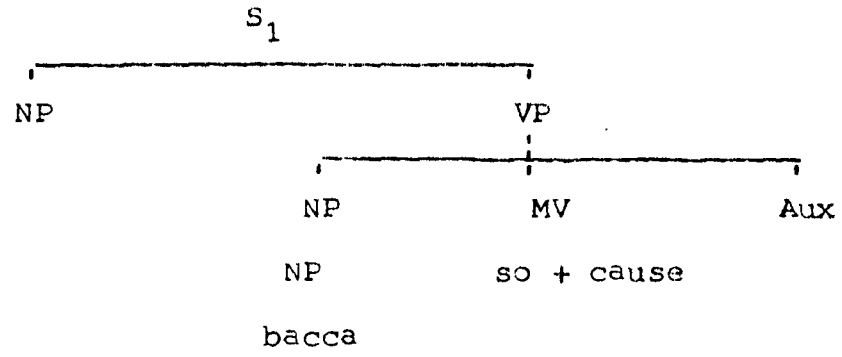
in case of (30) subject raising takes place on S_1 cycle to move up the subject of embedded S to the object position of the matrix S. After deletion of MV of S_2, pruning conditions score out S_2 node.

It is noted that the operation of the rule of subject raising, which, according to Kachru has been claimed as obligatory in the derivation of causative seems to be doubtful. Kachru and Klieman assume that the rule of subject raising has to be ordered after the application of tree prunning convention is carried out. After predicate raising, if we delete the VP and subsequently the S_2 nodes (according to Kachru and Klieman) at this stage of derivation from the underlying form of the sentences such as :

31. mā̃ ne bacce ko sulāya

'Mother caused the baby to sleep'

The remaining structure would look like :



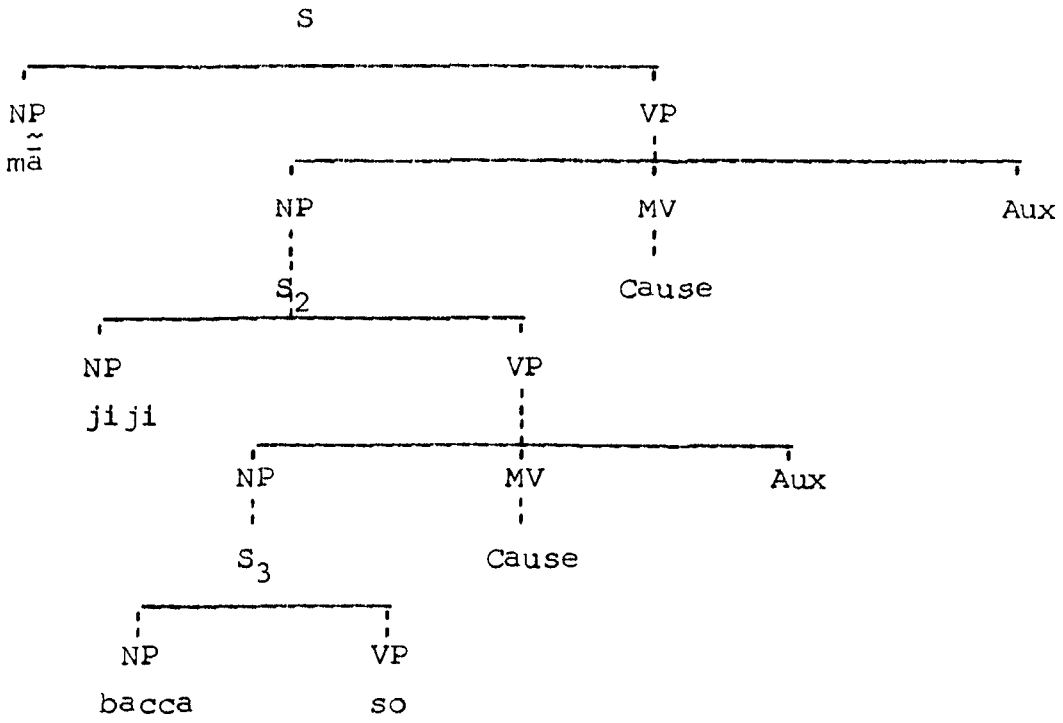
Now the yielded structure does not meet the structural description for the rule of subject raising. It seems indicative that if we apply the rule of subject raising (According to Kachru and Klieman) its effect is nullified. Hence, on S_1 cycle, the structural description for the rule of subject raising is blocked. This is because the remaining structure after tree pruning convention, automatically comes under immediate comination of matrix S.

It could be argued that the lexical insertion transformation must be ordered before the application of tree pruning convention.

It should be noticed that in other cases, such as the sentences (20) the application of tree pruning convention must be made after the cyclic rules are applied.

On the other hand, if the sentences such as below involve indirect causal forms, the rule of subject raising poses other problems.

32. mã̄ ne jiji se bacce ko sulvāya
'Mother consined elder sister to make the child sleep'.



It is mentioned that if the VP nodes and subsequently the embedded sentences/ nodes are deleted immediately after the rule of predicate raising from the above structure, the same consequences came into existence that have been observed earlier. In that case, if the rule of subject raising has to be operated, it applies recursively. It is correct that the rule of subject raising operates between two sentences in that it takes the subject of the lower S and makes it an object of the higher S. The problem is that S_2 node has already been pruned. This, then blocks the rule of subject raising. Therefore, it is suggested that two raising rules such as Predicate raising and subject raising must not be applied on a

structure. After predicate raising, if no other relevent transformation is required, embedded S nodes must be deleted at this stage. In such a case, the structural description for subject raising is blocked and the yielded structure should have been well formed.

In Urdu/Hindi, no evidence is available in which the rule of subject raising is employed in order to derive the VP complement. Neither it operates recursively. In this regard, it is very interesting to note that the rule of subject raising which is independently motivated to account for certain constructions discussed under NP-complementation, is employed in the derivation of causatives as Mrs. Kachru has suggested.

Mrs. Kachru claims that the causative sentence is not an instance of NP-complementation. If it were so the structure such as (NP (NP Not Vb)$_{\text{Caus}}$ should yield a grammatical causative sentence in Hindi. The arguments, in support of her claim that the causative sentences involve VP complements and they are ungrammatical in case they contain negative particle are neither convincing nor satisfactory. This statement is of course correct that the negativized causative does not result in grammatical sentence from the underlying structure such as (x (Y not sleep)$_{\text{Caus}}$. This, however, is not correct that the causatives with negative are ungrammatical as she claims. No one

native speaker can claim that the sentences sudh as below are ungrammatical as well as unacceptable:

maĩ ne rām ko nahĩ bulvāya
'I caused some one not to invite Ram'

In this regard, Klieman states that the causatives and negative that have worried to the scholars are automatically explained once we accept the claim that the causative transformation is a prelexical. She maintains that a sentence like

mã̃ ne jiji se bacce ko nahĩ sulvāya

has only one interpretation, namely, that in which nahĩ 'not' negates the whole structure X cause Y cause Z so on. In other words sentences such as above can not be derived from

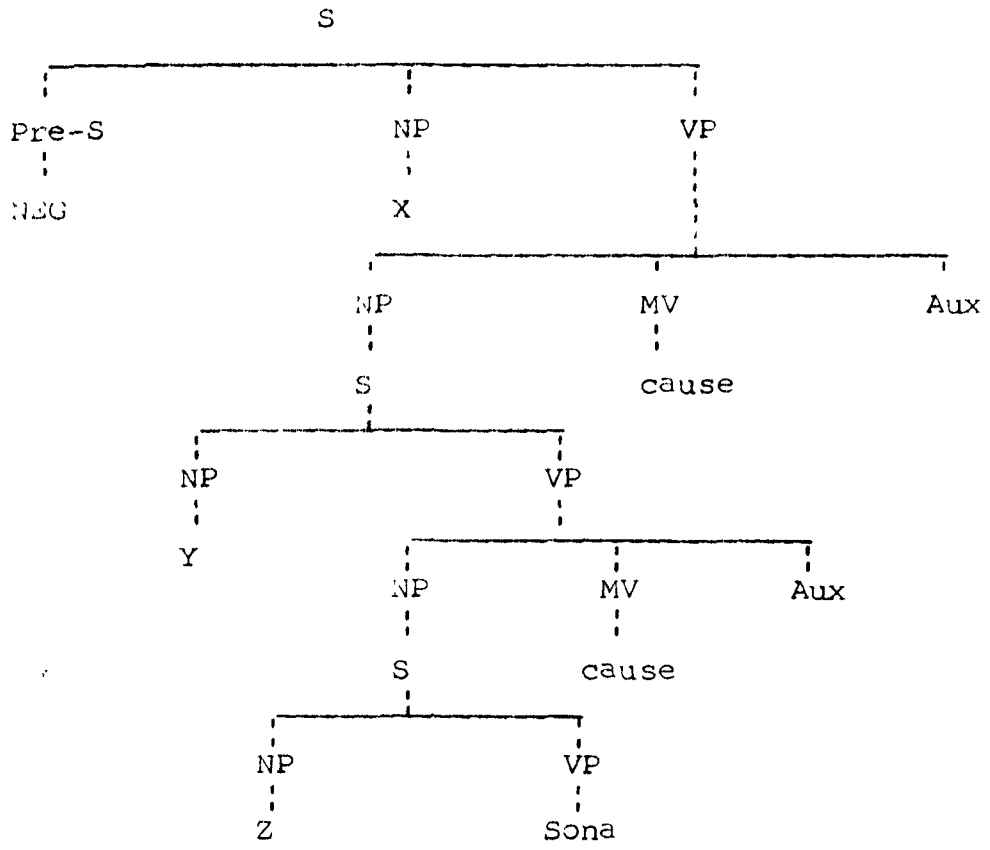
X cause Y cause Z nahĩ sona

nor from

X Cause Y not cause Z sona

Since the rule of predicate raising would be blocked if the predicates are raised over a negative. This statement is of course seems to be convincing and satisfactory as well. She further argues that the causative were exceptional with respect to negative and no problem arises in this regard.

It is noted that the analysis of causative with respect to negative proposed in this study is different from the approach adopted in other works. A causative with negative can be derived from the following form:



A negative transformation is made to negate the whole structure after the application of predicate raising of causative transformation. In that case, the rule of predicate raising is not blocked, at the point of derivation where causative transformation applies.

Causal verbs have been claimed as transitive verb which take sentential objects as complements. The present study also considers these sentential objects as NP compliments as Kliemen and Subbarao have proposed. It seems to be indicative that causal verbs are exceptional in their behaviour and thus contrast with other verbs that take sentential objects. They neither allow complementizer, nor pronominal head, unlike other

verbs which allow NP-complement.

It is noted that Kleiman (1971) at a point of derivation of a causative sentence, deletes the VP node and subsequently the S_2 node just after the operation of predicate raising and also before the application of lexical insertion rule which replaces semantic node V + cause by a lexical item such as , sulānā 'cause to sleep', khIlānā 'cause to eat' etc. [11] This assumption is probably false and non-convincing. The proposal that the lower S node has to be deleted not only before the operation of lexical transformation but also before cyclic transformations which Mrs. Kachru and Klieman have claimed is entirely incorrect. They provide no argument to prove that the application of tree pruning convention takes place before lexical insertion and before cyclic rules as well. The ordering node deletion before the application of cyclic transformations will prevent the derivation of a sentence in Urdu/Hindi. In order to get correct out put of a sentence the application of tree pruning convention is made after the operation of cyclic rule but not before the lexical insertion and before the cycle as well. If their proposal is accepted the operation of predicate raising does not effect in this case and the conventions for the pruning should be termed as an special case of pre-cyclic as well as prelexical tree pruning or node deletion.

On the other hand, in that case, the motion of cyclic application of transformation which was proposed by Chomsky (1965) and discussed also by Ross (1967) and Lakoff (1966) fails[12].

It seems reasonable to review briefly the accepted notion of cyclic transformation as proposed by transformationalists such as the following : the hypothesis that T.rules, apply cyclically to structural trees from bottom to top means that the rules apply first to inner most embedded sentences, if the structural description of the rule is satisfactorily met. After the operation of cyclic rules, the rules are reapplied to any sentence that dominates the structure that has been previously operated upon (For illustration, see Dr. Subbarao 1971:126)[13].

It is to be noticed that if the proposal presented by Kachru and Kleiman is not accepted, it neither invalidates nor supports the claim that the rule of predicate raising is prelexical as well as pre-cyclic that operates obligatorily. As the causatives have been claimed to be an exceptional in their behaviour and thus contrast with other complex structures, the rule of causativization must be ordered before other cyclic transformations only for the purpose, in order not to block the derivation of a causative sentence. If this proposal is accepted that the rule of predicate raising operates before cyclic rules as Klieman and Kachru have suggested, the rule of

predicate raising would not interact with other cyclic rules such as Reflexivization etc.

The convention for tree prunning proposed by Ross play an important role in the derivation of a sentence in Urdu/Hindi. It creates an appropriate structure for the application of cyclic rules. On the other hand, it also blocks the application of cyclic rules in order to get the correct out put. For example, in sentence (20) if apnā refers to mā after Relative Reduction, S_2 node is deleted and when apnā is coreferential with baccā, after Relative Reduction the resultant structure provides the environment for reflexivization. In case the reflexivization is applied at the stage mentioned above, we derive a sentence with wrong semantic interpretation.

It is mentioned that the structure such as X (Y (Z sona) cause) cause) provides evidence to support such a claim namely, that the rule of Predicate Raising operates recursively. It is recursive in this sense that it operates again and again in an specific order, on semantic material in order to create a constituent which is later replaced by a lexical item through lexical insertion transformation. If it is accepted that causative rules apply cyclically as other transformation do, the rule of Predicate Raising must be termed as Prelexical cyclic and others may be called post lexical cyclic rules. This is because the rule of Predicate Raising operates on semantic material and others on lexical material. The rule of Lexical

insertion is only the source that makes a rule as prelexical or a post lexical. On the other hand, if we maintain that causativization is not cyclical it can yield an ungrammatical causative. In case the rule applies recursively the Predicate of the most deeply embedded S can be placed under Matrix S bv first operation and then , second operation of Predicate Raising would create a constituent cause sona cause that cannot be replaced by a correct lexical item. There is no lexical verb in Urdu/Hindi to replace cause + sona + cause.

In view of the earlier discussion held so far, it seems to be clear that a majority of analysts supports the claim that causative sentences involve the process of embedding. But the contention presented by Balachandran (1971) in her analysis of causative construction in Hindi, that they do not have embedding and have the structure of simplex sentence got no enough support.

Causative constructions in Urdu/Hindi deal with interesting problems that support a particular hypothesis about the nature of lexical insertions in a.T.G. Grammar. The non-causative and causative clauses are related, both semantically and syntactically, in regular ways. The causative rule is a recursive rule which involves the process of embedding. This rule has been said to be a prelexical transformational rule as Kleiman and Kachru have suggested[14]. The underlying structure of a complex sentence which involves the causal forms has been suggested, such as below :

(NP (NP VP) cause)

ma ne bacce ko sulaya 'Mother made the baby to sleep'.

The problems of causativization according to traditional grammarians, have been discussed as straight forward process in Hindi/Urdu[15]. According to them a causative verb is derived by adding causative marker -a-or -va to the basic stem. The addition of -a to the root forms the first causal that might be called direct and of -va forms the second causal, i.e. indirect. If the basic stem ends with vowel phonema, -1 -phonem will be before -a or -v causal marker.

Urdu/Hindi contains two types of verbal stems: causative and non causative. Causatives are those that can be derived from primitive roots by adding causative markers. Non causatives refer to simple verbs that do not contain causal markers. Most intransitive and transitive verbs which are taken as basic stems yield direct and indirect causal stems. Take a few, for example, such as the following :

Simple/Basic		Ist causal	IInd causal
paṛh	'read'	'paṛhā	parhva
lIkh	'write'	lIkhā	lIkhva
sIkh	'learn'	sIkhā	sIkhva
khā	'eat'	khIlā	khIlva
pi	'drink'	pIlā	Pilva
so	'sleep'	sulā	sulva
ro	'weep'	rulā	rulva
hãs	'laugh'	hãsā	hasva

Few verbs are of such types that they seem to be causal in form, are not causal semantically. For example, banāna 'to make' bajāna 'to ring' sunāna 'to tell' are not causative semantically but act as simple transitive[16].

With regard to the discussion of causative constructions, verbs in Urdu/Hindi may be kept in the following sub-categories :

a) Most intransitive and transitive are taken as the basic stems from which the first and second causal stems are derived. The following are a few examples :

Basic / Simple		Ist causal	IInd causal
lIkhnà	'write'	lIkhāna	lIkhvāna
paṛhnā	'read'	paṛhāna	paṛhvāna
khānā	'eat'	khIlāna	khIlvāna
sonā	'sleep'	sulāna	sulvāna
ronā	'weep'	rulāna	rulvāna

b) verbal stems which can be converted only in second or indirect causal stems are such as :

xaridna	'buy'	xxx	xarIdvāna
rangna	'dye'	xxx	rangvāna
mānna	'accept'	xxx	manvāna
badalna	'change'	xxx	badalvāna
bhejna	'send'	xxx	bhIjvāna
bolna	'say'	xxx	bulvāna

Few of the verbs contain two distinct causal forms which behave as single one in the context of the indirect causative. Such verbs are :

mãgnā	'ask for'	-	mãgāna/mangvāna
karnā	'do'	-	karnā/karvāna
denā	'give'	-	dIlāna/dIlvāna

observe the examples, such as follows :

33. maĩ ne latā ko rām se ek kItāb dIlāi

34. maĩ ne latā ko rām se ek KItāb dIlvāi

'I caused Ram to give a book to Lata'

There are, however, some causal verbs that seem to be second causal in form but can be used as first causal e.g. pakaṛnā 'arrest', bulāna 'call' etc.

This is illustrated in the following sentences :

35. rām ne us cor ko pakaṛvā diya

'Ram caused someone to arrest the thief'

36. maĩ ne lilā ko yahĩ bulvāya hai

'I caused someone to invite here Lila'

c) Verbs that yield only direct causatives are, for example:

taṛapnā	'to be restless	tarpana	xxx
tarasnā		tarsana	xxx
khIlna	'be opened'	khIlāna	xxx

Verbs that contain two distinct causal stems to be used as direct causal, are, for example :

jitnā	'win	jitāna/jItvāna	xxx
hārnā	'be defeated'	harana/harvāna	xxx
ronā	'weep'	rulāna/rulvāna	xxx

d) verbs which never yield causals and do not participate in causative constructions are such as ānā 'come', jānā 'go', socnā 'think', pāna 'get', kamāna 'earn', jānna 'know', pukārna 'call', muskarāna 'smile', cillāna 'shout', lena 'take, etc.

Note that kamvana from kamana, livana from lena and cIlvana from cIlana etc. are scored out as these forms are not used as part of standard language.

Note that the treatment of the verbs such as bhIgāna 'be wet', ḍubāna 'drawn' ghabrāna 'make nervous', as direct causal, proposed by Balchandran (1971) does not seem to be satisfactory.

Indirect causal kahvānā of kahnā 'say', proposed by Kachru (1980:103) is also not satisfactory. Instead, I prefer kahIlvānā as second causal of kahna 'say'. Similarly bhIgonā and ḍubonā is more appropriate than mentioned above.

We will now discuss the derivation of a causative sentence based on an alternative approach that will be presented in the following lines.

The process of causativization involves the following rules:

1. Predicate Raising: a prelexical rule of causativization Transformation that via Predicate Raising operates on semantic material and creates a constituent which is later replaced by a lexical item.

2. Case marking rules, which assign proper case marking to the NPs occurred in causative constructions.

It seems to be indicative that the subject raising rule is not considered in this treatment. The convention for tree pruning automatically provides the environment for the operation of case marking rules, if no other relevant transformation applies The case marking rules, applied to the causative sentences are obligatory. The agentive post-position ne is placed after the agent of the sentence, instrumental se after mediator and dative ko after the recipient. The case marking rules that assign objective ko, dative ko and the instrumental se etc. are all relevant for other areas of Urdu/Hindi grammar also. The case marking rules which does not seem to be the obligatory part of the causative rule, operate not only after all the T. Rules but after the cycle as well.

The prelexical rule of causativization which deals with the process of predicate raising, distinguishes the causative sentences from other non causal complex sentences. The

prelexical rule of causativization in Urdu/Hindi is obligatory. It operates in order to attach the inner most verb of the embedded S to the causative vero of the matrix S and creates the structure of the type (NP(NP(NPVB) caus)caus) where NP1, NP2 and NP3 are participants and Vb is the non causal form of any verb. Causativization is very similar to the rule of subject raising, that operates between two sentences in that it takes an element from one sentence and makes it a part of a higher sentence. The causative transformation is applied before the semantic node verb+caus and replaces it by a single lexical item like sulānā or sulvānā i.e. the causal forms of sonā 'to sleep' through lexical insertion transformations. Causativization involves a process of successive embedding in the formation of causatives in Urdu/Hindi. Causative rule is a recursive rule which is ordered not only before such cyclic rules as reflexivizate, adjectivization, adverbialization etc. but before the cycle as well.

The rule of lexical insertion takes place immediately after the predicate raising. It precedes not only before cyclic rules but before the cycle as well.

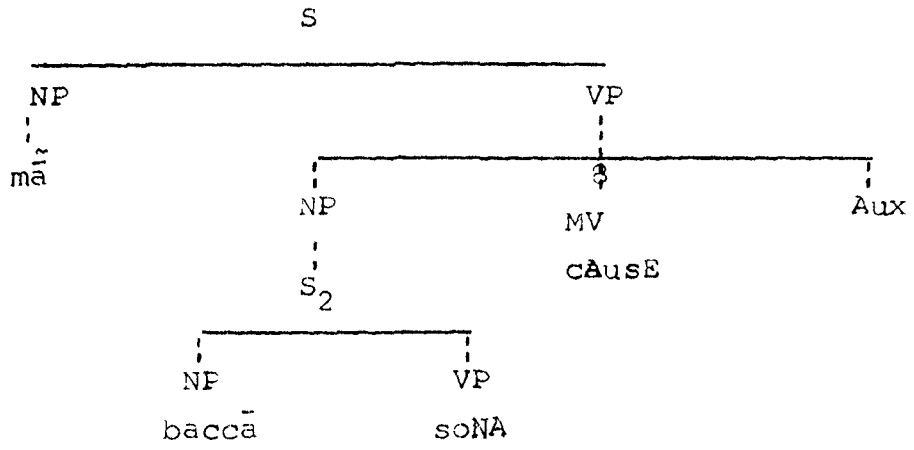
This fact also seems to be indicative that the causatives in Urdu/Hindi are instances of NP-complementation.

We will now present a step by step derivation of a causative sentence according to the approach that has been discussed above. Consider the sentence and apply relevant rules to its underlying form:

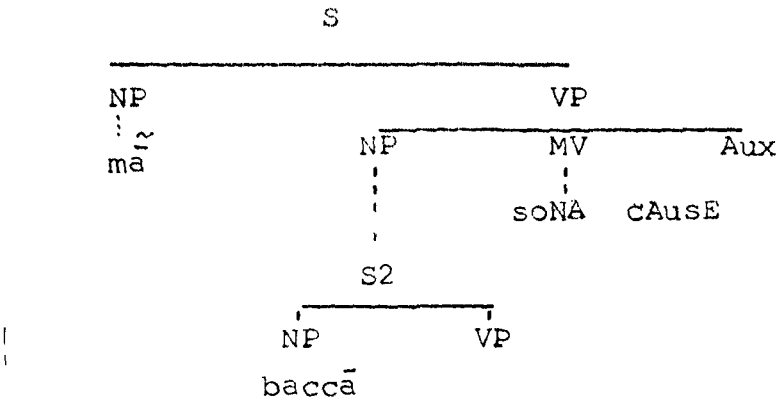
37. mã̃ ne bacce ko sulāya

'Mother made the child to sleep'

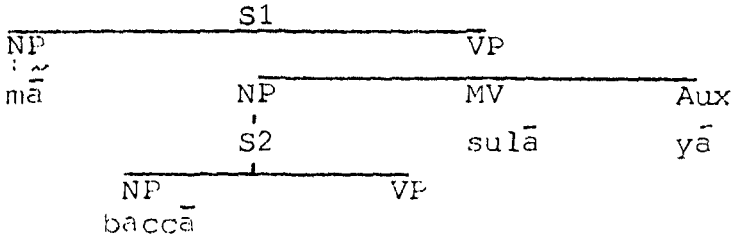
(Capital letters stands for semantic material)



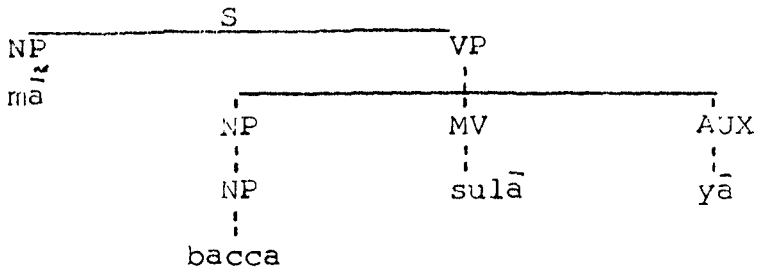
After Predicate raising we obtain



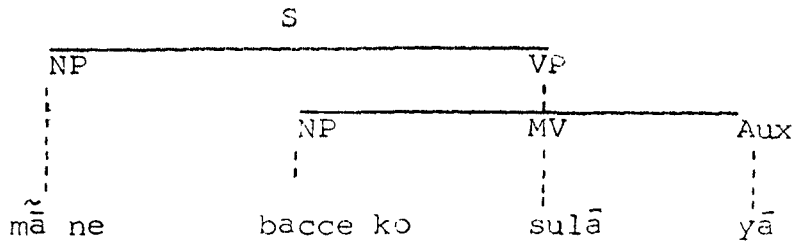
After lexical insertion transformation, where the lexical item Sulāna replaces the constituent Sona+cause we obtain the form:



By tree pruning conventions, nodes VP and subsequently S2 are deleted. After this phenomenon the remaining structure would look like the following:



Now case marking rules apply to assign proper cases to noun phrases and we yield the structure such as below :

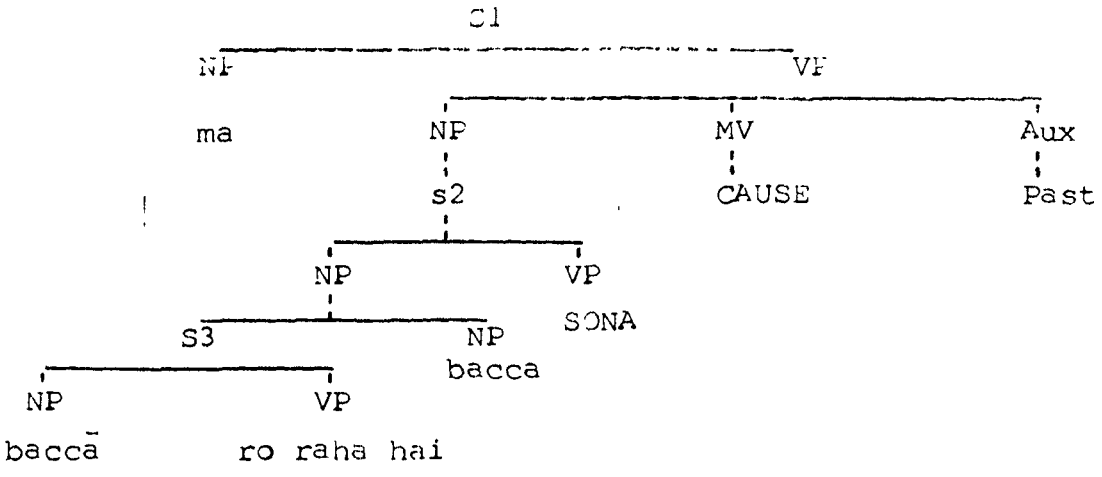


Let us consider a sentence that involves the problems of Adjectivization, such as the following:

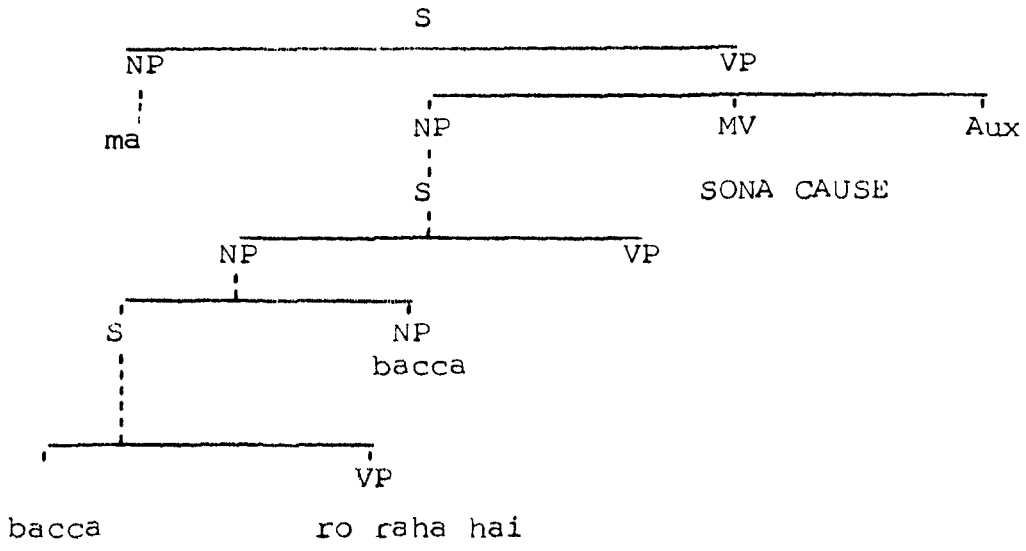
38. mā̃ ne rote hue bacce ko sulāyā

'Mother made the crying boy sleep'

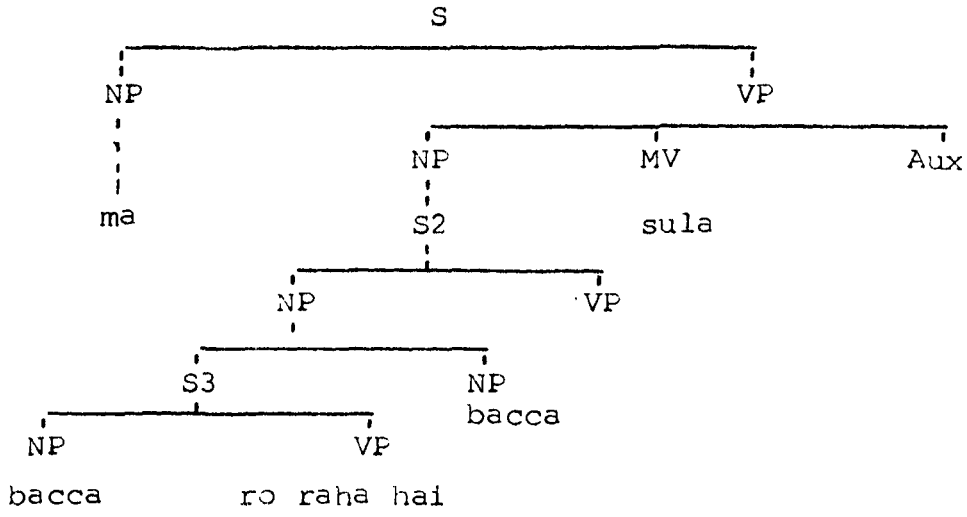
The underlying structure of the above is as



The rule of predicate raising applies on semantic representation of a verb creating the structure such as

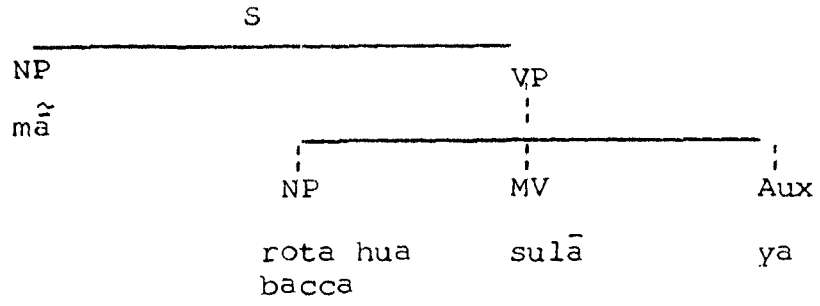


After lexical insertion transformation the yielded structure is as

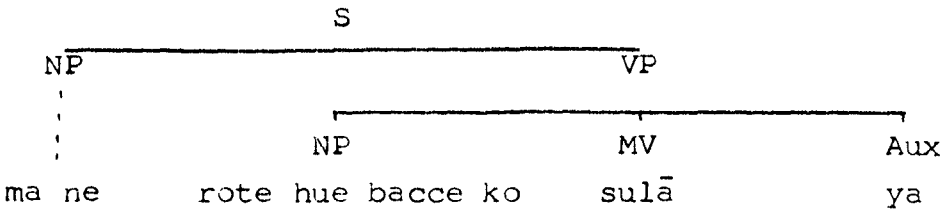


None of the rules can apply on S3 cycle.

Now the Rule of Adjectivization applies on S2 cycle. After Adjectivization S3 and S2 nodes are erased to yield the following form:



After case marking rules and relevant phonological interpretation we obtain (38):

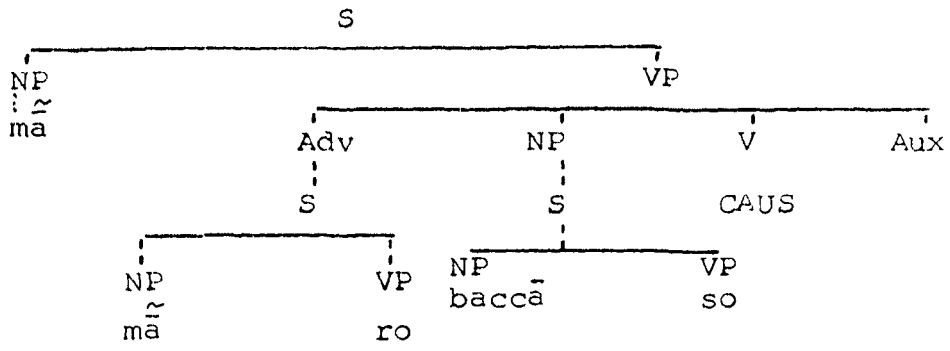


It should be noticed that in terms of tree Prunning conventions,this analysis differs from the approach adopted by Kheman (1971). She deletes VP and subsequently the S2 nodes not only before the cyclic transformation but before the rule of lexicalization as well. This assumption is probably false. Therefore, it is suggested that the rule of lexical insertion must operate immediately after the application of predicate raising.

It is noted that the sentence such as (38) is of course ambiguous. The participial rote hUe in this sentence has been described as modifier. On the other hand, if the participial rote hue refers to mã̃ 'mother' , the subject of the causal verb, the participial clause is embedded directly under S1 and not under S2. In this case, the underlying representation of such

sentences in which the subject of participial phrase is corefe-rential with the subject of the top most sentence would look on follows :

(A)



Other ambiguous sentences which are explained by two distinct semantic interpretation, are such as the following:

39. mā̃ ne bacce ko rote hue sulāya

(a) Mother made the child sleep, crying

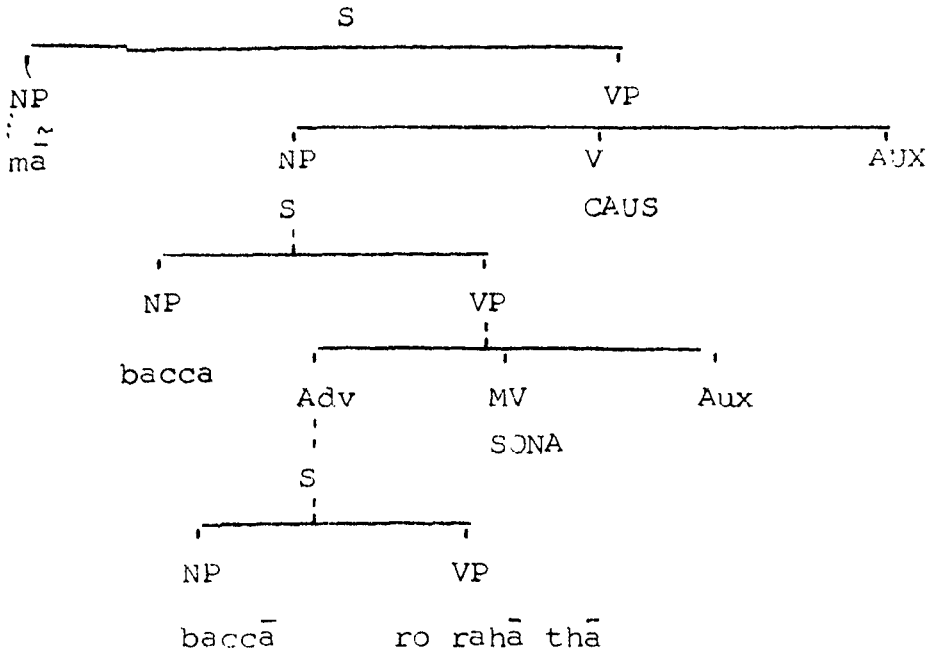
(b) Mother made the child who was crying sleep.

40. mā̃ ne bacce ko āte hi sulā diyā

'Mother made the child sleep as she/child came'.

In case the participial rote hue 'weeping' and phrase āte hi refer to mā̃ 'mother', in sentences such as above, the underlying structure of these sentences would be similar to the structure such as (A) above. On the other hand, if phrases rote hue and āte hi refer to baccā (child), the surface object of the sentence, the participial clauses appear under S2 but not under S1. With this reference, the deep structure of these sentences would be different from the structure such as (A) above.

Examine the following:



In each case, a rule of predicate Raising is not blocked. The rule of Adverbialization follow the rule of causativization.

It is not crucial that bacce 'child' and participial rote hue are interchanged with each other in the sentence. This however, is not correct that participial adverbials, in each case, refer only to the subject of top most sentence. In some contexts, the interpretation that 'baccā ro rahā thā' 'the boy was weeping' is also possible.

Some other examples are given such as the following:

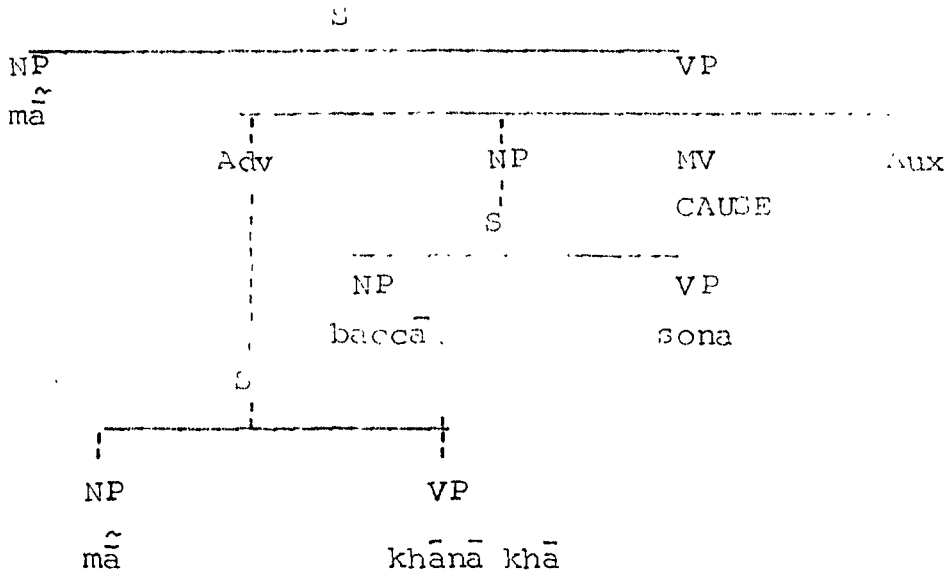
41. mā̃ ne bacce ko khānā khā kar sulāyā

41a. mā̃ ne khānā khākar bacce ko sulāyā

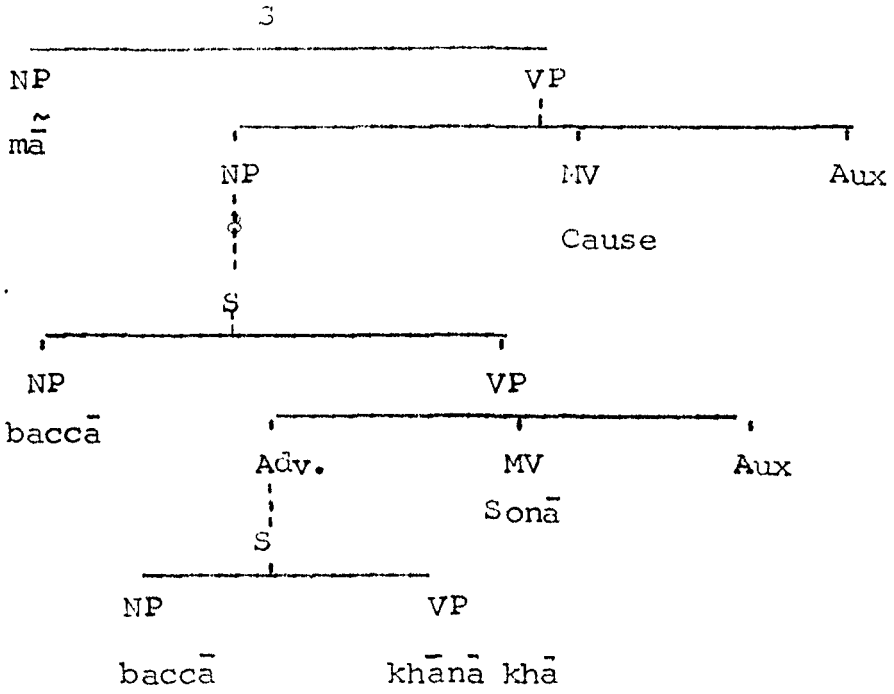
'Having eaten, the mother put the child to sleep'

It is observed that sentences (41-41a) are not ambiguous, phrase khānā khākar in these sentences unambiguously refer only to mā̃ 'mother', and not to baccā 'child'.

The underlying structure for these sentences roughly is as follows :



The prelexical rule of causativization applies to (mā̃ (baccā sonā) CAUSE). Next the adverbialization rule that yields V-kar phrases applies as the subjects of the causative verb and the verb khā are identical (Kachru 1970:84). This statement is probably satisfactory and supports the claim that the causative rule is a prelexical rule. On the other hand, if we identify the subject of khā as being baccā in that case, the hypothetical deep structure would be as follows :



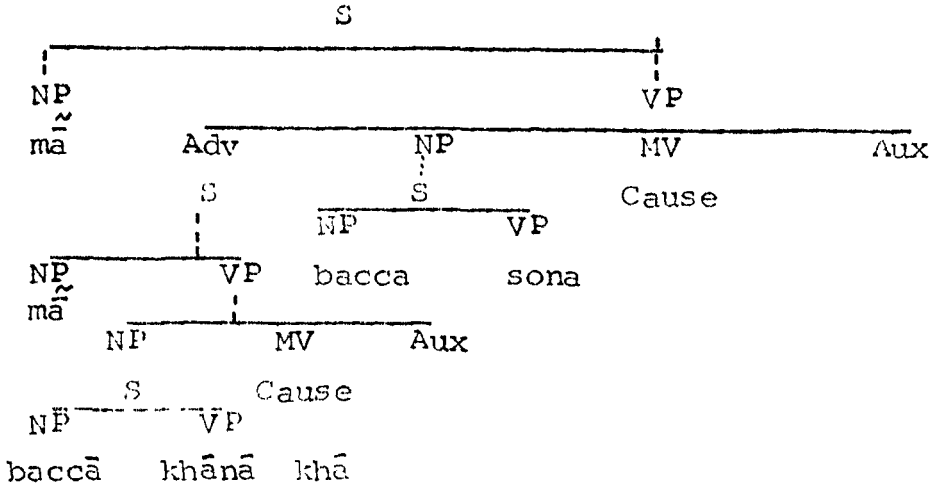
In this case, the identy condition is not met, hence, the rule is blocked. This is because, the subject of khā is identical to the subject of embedded S.

Even the causal V-kar phrase refers to the subject of the matrix S.' Consider the example such as the following :

42. mā̃ ne bacce ko khānā khīla kar sulāyā

'Mother put the child to sleep after having feeden'.

The underlying representation of this sentence is as



In order to derive two causal forms, predicate raising has to apply simultaneously to more than one constituent at the same time. This assumption is not crucial. But it is not clear that under what conditions one of the two occurrences of baccā 'child' under two distinct sentences could be deleted.

Other instances of participle adverbial which do not seem to be ambiguous are provided by the sentences such as the following :

43. Is top ne jahāzõ ko uṛte hue gIrāyā
'This gun put the plane which were flying fall'

44. naukar ne kutte ko bhõkte hue bhagāyā
'The servant made the dog who was barking run'

45. mālī ne tote ko ām kutarte hue uṛāyā
'The gardener made the parrot which was cutting mango fly'

It is noted that the participial adverbs used in above sentences unambiguously refer only to the surface objects of the sentences.

If, however, the post-position se is used with participle in place of hue, the participial adverb refers only to surface object of the sentence unambiguously. Not all the participials allow this postposition. Examine the example :

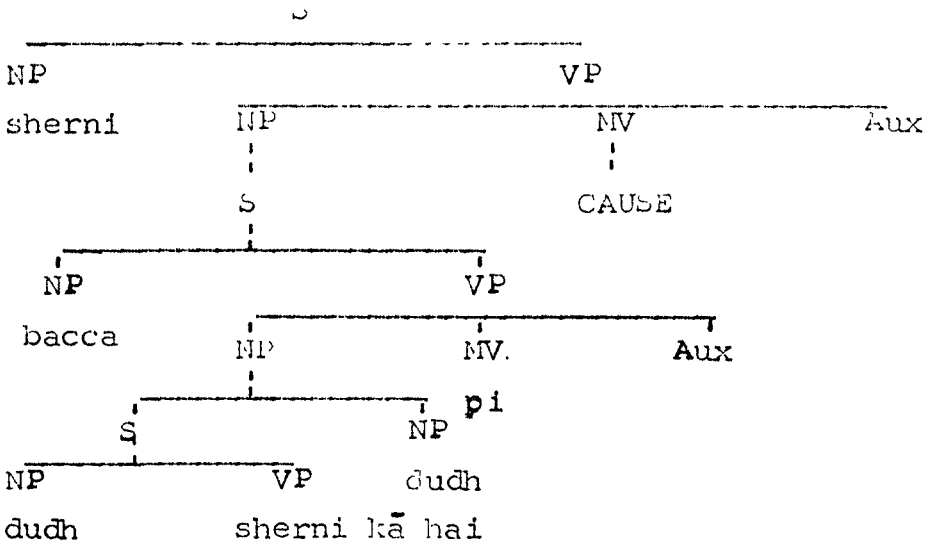
mā ne bacce ko sote se jagāyā/uṭhāyā
'The mother awake the child who was sleeping'.

It is clear from the examples that the constraints pointed out by Balachandran and elaborated by Krishnamurti (1970) were indeed operative in the language, if the native speaker does not assign the interpretation as was claimed by the sentences such as 43-45 above.

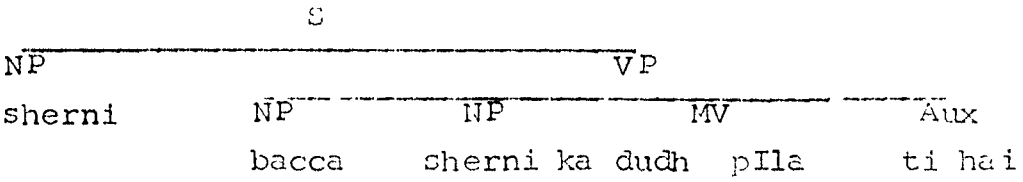
Let us examine the relevant ordering causativization and reflexivization which operate on sentences such as :

46. Sherni bacce ko apnā dudh pIlāti hai

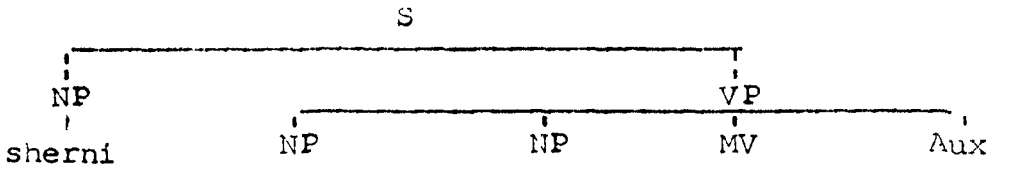
The deep structure of this sentence is as :



After predicate raising and lexical insertion the rule of Relative clause formation and Relative Reduction operate, yielding the structure (after tree pruning)



Now the two occurrences of sherni are dominated by the same S and Reflexivization applies and changes sherni +kā to apnā, generating the structure



Finally the case marking rule applies to assign dative ko after NP bacca and after all relevant phonological interpretation we obtain (46).

The ordering of the rules, therefore is

1. Causative Transformation
2. Reletivization
3. Relative Reduction
4. Reflexivization
5. Case assignment rule

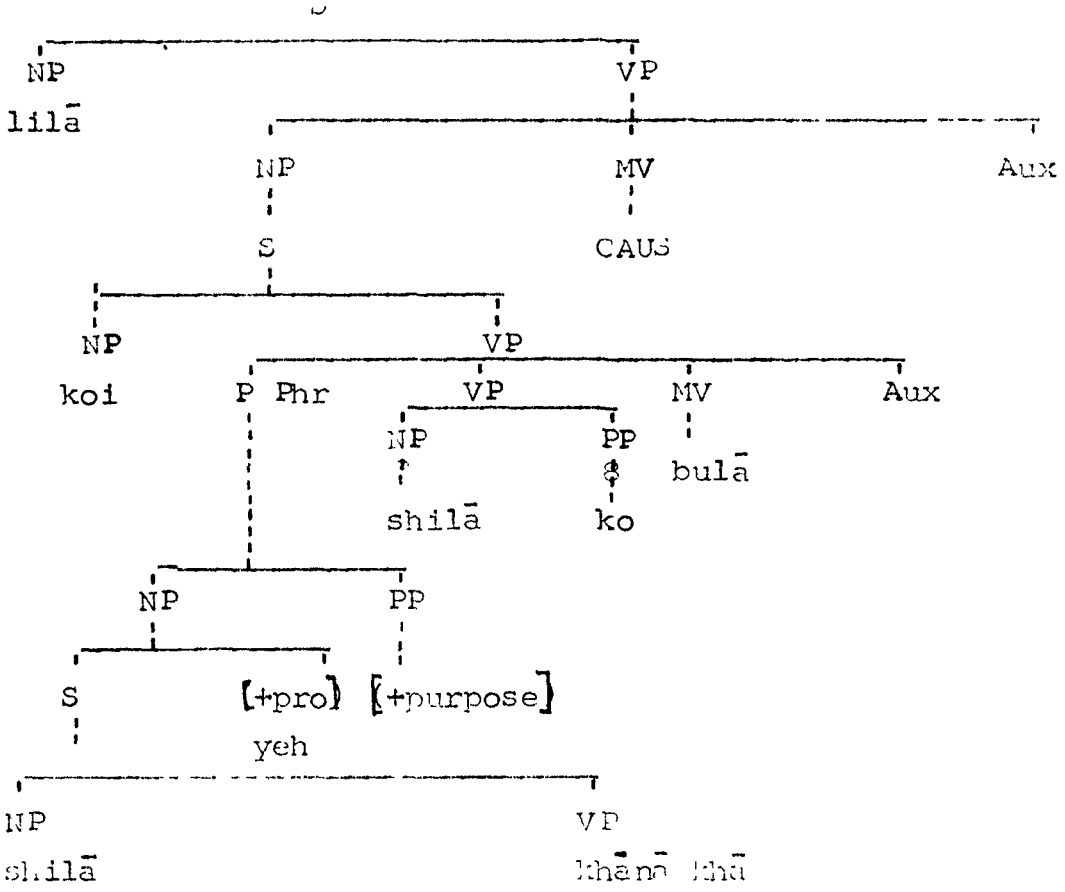
Noun phrase complement to be as infinitival and clausal complement are used in causatives :

47. lilā ne Shilā ko khānā khāne ko bulvāyā hai

47a. lilā ne shilā ko Isliye bulvāyā hai ki voh khānā khae

'Lila invited Shila to eat food'

The following has been set up the deep structure of above sentences :

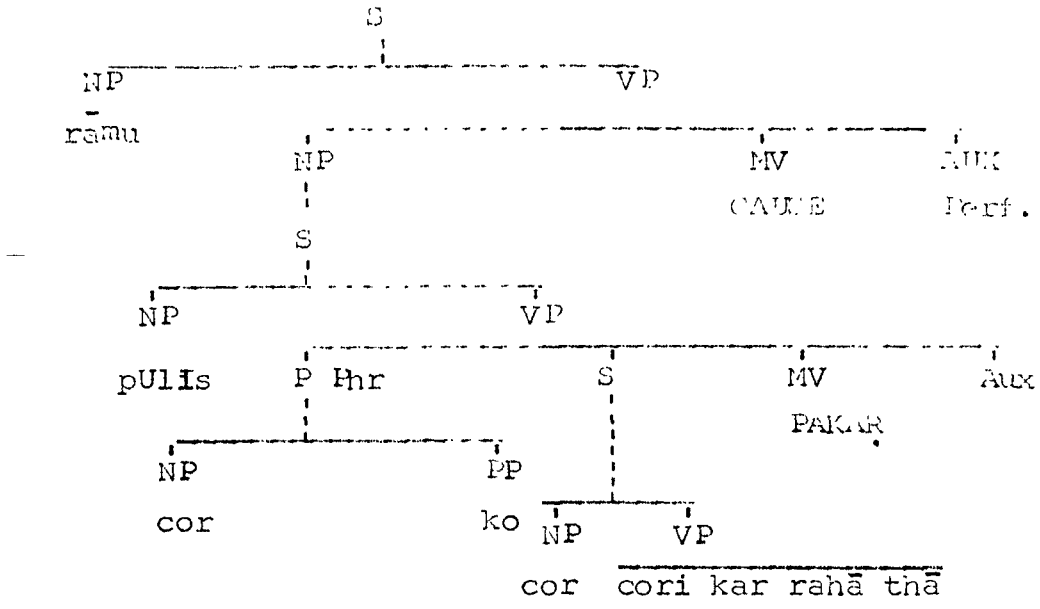


After predicate reduction, the rule of nominalization will apply to the structure such as above, and after all the relevant transformations and phonological rule, the yielded structures would like above.

Let us consider sentences like the following which involve VP-complement:

48. rāmu ne pUlIs se corko cori karte pakaṛvāyā

The deep structure of the sentence such as (48), in a simplified form is the following :



The rules that are relevant for the derivation of the above sentence are causative transformation and VP-complement transformation, causativization has to be ordered before VP-complementation rules for otherwise the rule of Predicate Raising is blocked.

This preliminary discussion raises more questions than these were answered. It is hoped that the foregoing discussion will lead a researcher for further investigation.

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2. Kaleim an, A.B. (1971) Some aspects of the causative construction in Hindi, Kachru (1968) studies Transformation Gr. of Hindi, Kachru (1971) causative sentences in Hindi revisited and Subbarao, K.V. (1971) Notes on Reflexivization in Hindi may be consulted for detailed discussion.

3. Subbarao, K.V. (1967) 'Some Aspects of Pronominalization and Reflexivization in Hindi' and (1971) Notes on Reflexivization in Hindi'.

4. Bahl, K.C.(1967) 'The causal verbs in Hindi'.

5. Balachandran, L.B. (1973) 'A case Gr. of Hindi' with special reference to the causative sentences.

6. Subbarao, K.V. (1971 :195) 'Papers on Hindi syntax' Vol. 1 No. 2

7. Participial modifiers discussed in this work may be consulted in this regard.

8. Krishnamurti, Bh. (1970) Causative constructions in Indian Languages: Some semantic and syntectic aspects, IL 32 : 1 18-35.

9. Sinha, A.C. (1970) Predicate complement constructions in Hindi and English.

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13. Subbarao, K.V. (1971:126) Papers on Hindi syntax. Vol.-1, No. 2

14. Kachru (1971:82) Papers on Hindi syntax vol-1, No. 2

15. See Kellogg, S.H. (1955:252) 'A Gr. of the Hindi language.

16. Greaves, E. (1933:271) Hindi Gr.'

CHAPTER-VI

CLAUSES EMBEDDED IN THE VERB PHRASE :

VERB PHRASE COMPLEMENTATION:

This chapter deals with the sentences embedded within the verb phrase of another sentence. The clauses that are embedded in the verb phrase are to be reduced to phrases or less than full clauses on surface level. When a clause is embedded in a VP and occurs directly under the immediate domination of a VP, it is said to be functioning as a verbal complement. Notice that the verbal complements in Urdu/Hindi are derived from an embedded sentence, the embedding takes place only if the subject of the verbal complement is identical and coreferntial with the object of the finite verb. A verb phrase that does not contain an embedded sentence (discussed in the verb phrase in chapter 2) is a simple verb phrase and that which contains an embedded sentence is said to be a complex verb phrase. The embedded clauses when come to the surface as verbal complements may be one of the following :

Participial phrases

Noun phrases

Adjectives

The details of structures that result in various verbal complements and the operations performed to the underlying structure are :

VERB PHRASE COMPLEMENTS :

In Urdu/Hindi, a VP may contain an embedded sentence as constituent. This is exemplified in the following sentences :

1. maĩ ne aj latā ko Xush pāyā 'I found Lata happy today'.
2. laṛkõ ne rām ko apnā kaiptIn cuna.
   their
   'The boys selected Ram ∠ captain'.
3. mã ne bacce ko sote hue uṭhāyā 'Mother waked up the child sleeping'.

In sentences 1-3, adjective Xush 'happy', noun phrase apnā kaiptIn 'their captain' and participle sota hua 'sleeping' respectively are what remain of embedded sentences after certain transformations have been applied.

In sentences 1-3, underlined adjective, noun phrase and participle are derived from the full clauses such as below :

1a. latā Xush thi 'Lata was happy'

2a. ram kaiptIn thā 'Ram was Captain'

3a. baccā so rahā thā 'The child was sleeping

A verbal complement clause has been mentioned in the expansion of the VP of another S. This assumption is probably not false. A verb phrase in Urdu/Hindi may be either simple or complex The simple verb phrase does not contain verbal complement clause. The complex verb phrase consists of a sentence preceding the MV, embedded directly under the immediate domination of a VP, rather than under the NP which is dominated by a VP.

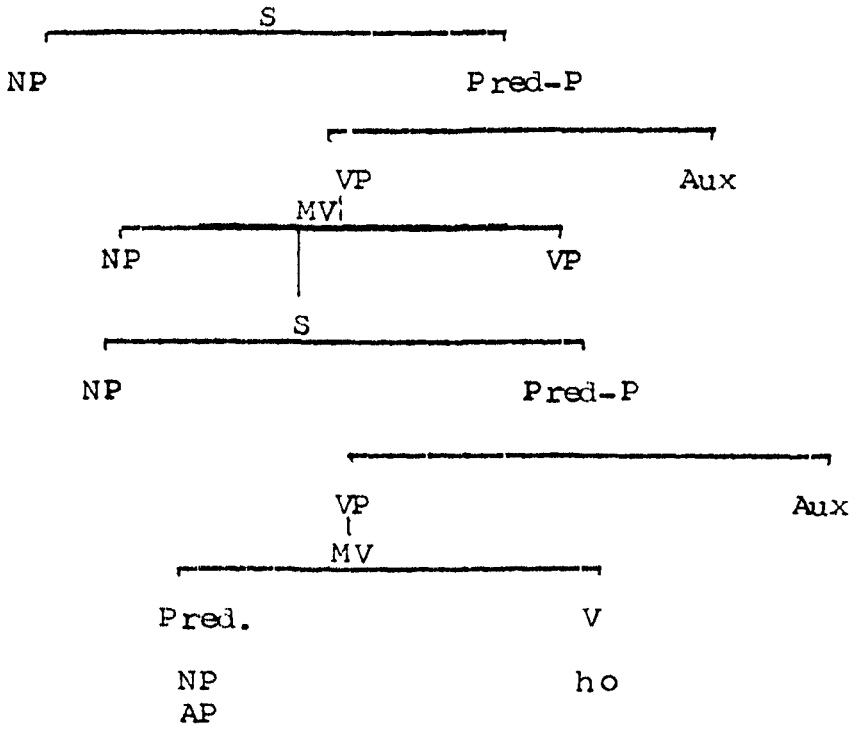
All the above underlined phrases are instances of verbal complementation and these phrases are derived from embedded sentences.

The conditions for the application of the verbal complementation rule which have been discussed in Kachru (1968)[1], are as follows : 'the embedded S must be dominated by verb and the subject of the embedded S must be identical to the object of the matrix S'.

On page 59, the following sentences are provided by her to exemplify the verbal complement construction :

4. larkõ ne kamrā sāf kIyā 'The boys made the room clean
5. maĩ rām ko apnā bhāi māntā hũ 'I consider Ram my brother'.
6. rājā ne brahman ko apnā mantari banāyā
   'The king made the Brahman his minister'.

The underlying structure of the above sentences proposed by Kachru is as follows :



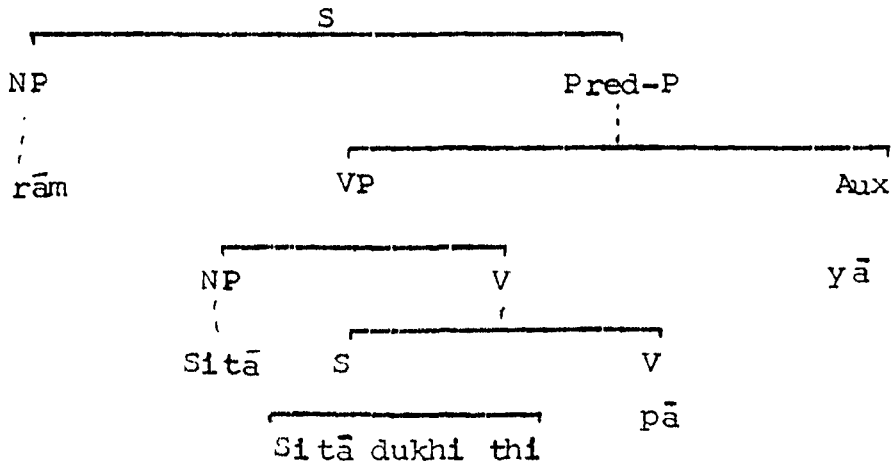
In sentences 4-6 sāf 'clean' apnā bhāi 'my brother' and apnā mantri 'his minister' respectively are instances of verbal complements.

In addition to instances such as 4-6 where verbal complement is attached to the MV, Kachru (1968, 1980)[2] in her analysis of conjunct verbs and adverbs in Hindi, also discusses examples where the participles and adjectives function as verbal complements. The following sentences are given as illustration.

7. us ne darvaza band kiya 'He closed the door'
8. Is davā ne rogi ko acchā kar diyā
   'This medicine cured the patient'.
9. us ne kām Xatam kar diyā 'He ended the work'
10. rām ne sitā ko dukhi pāyā 'Ram found Sita to be unhappy'
11. rām ne cor ko bhāgte hue pakṛā
   'Ram caught the thief (as he was) running away'
12. maĩ ne shyām ko apni bahan ke sāth bazar jāte dekhā
a. 'I saw Shyam going to market with his sister'.
b. 'I saw Shyam when I was going to market with my sister'.

In sentences 7-8, adjectives band, acchā and Xatam are instances of verbal complements. They are derived by the same verbal complement transformation that derives phrases such as dukhi, bhāgte hue and apni bahan ke sāth bāzār jāte in sentences 10-12. The underlying structure of these sentences is as (A) below :

(A)



It is not easy to say why sentences such as 7-9 are different grammatically from sentences such as 10-12. The relationship that holds between sitā and dukhi is the same as that which holds between darvāzā and band and rogi and acchā or kām and Xatam. The constraints between the NP and adjective involved will be taken care of by the embedded S (Kachru 1968:89)[3]

This statement seems to be satisfactory but it does not mean that the relationship that exists between band and karnā or acchā and karnā or Xtam and karnā is the same as that between dukhi and pānā. It is correct that the constraints between the noun and adjective can be determined with in the embedded S. However, there is no way to determine the constraint between adjective and verb. It is difficult to derive the sentences such as 7-9, by the basis similar to (A).

The sentences 11-12 are ambiguous. But in one of their senses they involve verbal complementation. Participles do not refer unambiguously by either to rām and maĩ or cor and shyām. Participle in 12, indicates a three way ambiguity. In one of this senses it refers to the subject of the sentence to function as adverb but in its other senses it refers only in the object of the sentence. In case of its reference to the object it is not clear that participle is verbal or nominal complement.

This ambiguity can only be resolved in terms of their deep structures that derive such phrases.

It can be argued that the imperfect participial used with finite verb pakar 'catch' in sentences such as (11) can

refer unambiguously to the object of finite verb, in case it takes post position se/mẽ in place of hua form attached to the respective participial :

a. rām ne corko bhāgte se pakṛā 'Ram caught thief (as he was) running away'.

b. pUlIs ne cor ko sef kholte mẽ/se pakṛā

'Police caught thief who was opening safe'

c. mã ne bacce ko gIrte se pakṛā

'Mother caught the child as he was falling'.

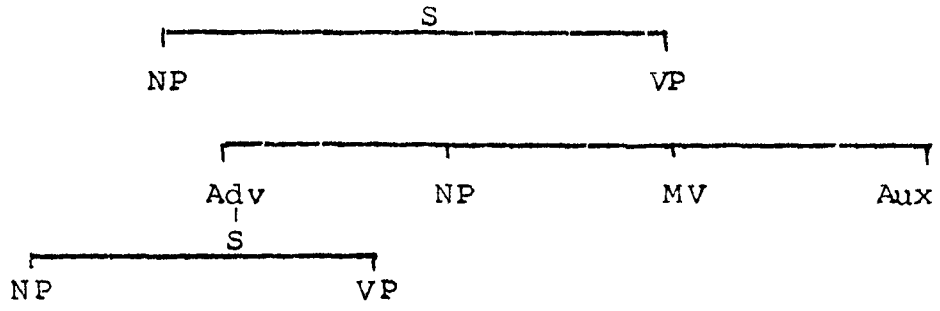
The ambiguity can not be removed, if, however, the perfect participial takes such postpositions :

d. maĩ ne ek cIṛyā baiṭhe se pakṛi

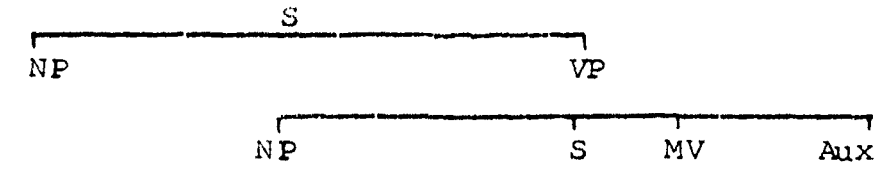
'I caught a bird as I/bird was sitting'.

The above facts emerge from an examination of the following structures.

The participle refers only to the subject of the sentence, if the underlying structure is as follows:



On the other hand, if the underlying structure is as follows, only the verbal complement occurs :



It should be noticed that the distinguishing characteristic of the verb dekhenā 'see' is that it allows both VP and NP-complement freely in some context. This creats an ambiguity at superficial level, in order to determine the correct function of the out put. To resolve this ambiguity, the best solution is that the verb such as dekhna 'see' could not be involved in the inventory of the verbs that allow verbal complements.

It can be argued that ambiguity is an extremely common phenomenon in the language and it does not make the system of a language to be defective. It is however, not necessary that language should be free from this phenomenon.

The basic objection to the analysis of 7-9 is that the adjectives in adj+karna combinations are treated as verbal complement but the noun in noun + karna combinations are not given the same analysis although they represent the same relationship on the semantic level. Examples are given such as below :

13. lata ne sari pasand ki 'Lata liked a sari
14. us ne yeh prastav svikār kiyā 'He accepted this proposal.

It is noted that Kachru (1980), on page 62 contradicts herself treating adjective band 'close' in sentence 7, as object complement.[4]

It is very interesting to note that by Kachru (1968) adjective in adj + karna combinations is treated as verbal complement. In 13-14 noun in noun + karna combinations is not a complement and in 15-16, noun in N + karna combinations is an object of the verb :

15. voh mujh par vishvās kartā hai
16. voh tum se bhay kartā hai.

In case of 13-16 the statement is correct. This, however, is not clear that why (17) unlike (18) an abstract noun preceded by a post positional phrase is treated as complement rather than an object of the verb :

17. rām ko mohan par ɣussā āyā 'Ram was angry with Mohan'
18. rām apne bacco̰ par bahut dhyān detā hai
'Ram pays more attention to his children'.

In case of 7-9 this assumption is probably false. But the claim for 10 does not seem to be unsatisfactory. However, the subject raising rule seems to be more satisfactory which derives adjectives and nouns such as in 19-21, rather than verbal complementation process :

19. mujh ko darvāzā band lagtā hai 'The door seems to be closed to me'.
20. latā ko yeh kItāb acchi jā̃ci 'This book appleas good to Lata'
21. mā̃i rām ko apnā bhāi mā̃ntā hū̃ 'I consider Ram my brother'.

It is to be noticed that the combinations of an adjective and a verb such as in 7-9 can be treated differently from the combination of a noun and a verb such as 13-16. Sentences containing the combinations of a noun and a verb such as 13-16 can be derived by the same highly simplified base rules that generate the forms of all simple declarative indicative sentences. However, certain occurrence restrictions can be specified by the cross classification of lexical items instead of the transformational component.

In the following discussion an attempt is made to derive the sentences such as 7-9 through the process of subject raising rather than verbal complementation rule as proposed by Kachru (1968)

As regards sentences such as 5 following the treatment of Subbarao (1971), I consider the NP such as apnā bhāi 'my brother' as nominal complement to be derived by the rule of subject raising rather than verbal complementation rule as proposed by Kachru (1968).[5]

There is a small set of verbs such as dekhnā 'see' pānā 'find' and pakaṛnā 'catch' that allow participle as VP-complement (Kachru 1980).

Other such verbs that allow VP-complements are banānā 'make', cunnā 'select', khelnā 'play', rãgnā 'dye', dhonā 'wash', lIkhnā 'write', khĩchnā 'draw', mIlnā 'find', roknā 'stop', lenā 'take' etc.

Other instances of verbal complementation that do not creat ambiguity, however, have not been discussed by Kachru. These are given in the following :

22. pulIs ne cor ko cori karte hue pakṛā
'Police cought thief as he was stealing

23. latā̃ bacce ko marā huā aspatāl mẽ lāi
'Lata brought child died to Hospital'.

24. maĩ ne kal ashok ko laibareri mẽ akele paṛhte pāyā
'I found Ashok in Library studing alone.'

25. maĩ ne kal Is bacce ko chat se gIrte gIrte rokā
'I saved this child yesterday falling down from roof'.

25a. maĩ ne kal Is bacce ko chat se gIrte se rokā

26. dhobi ne kapṛe saf dhoe 'The washerman washed clothes clean.'

27. latā ne pakoṛe acche banāe 'Lata made pakoras well

28. Is laṛke ne āj khel acchā khelā
'Today this boy played the sgame well'.

29. jānwarõ ne sher ko apnā rājā cunā 'Animals selected lion his king'.

30. ek faqir ne dakuõ ko Insān banā diyā

'A beggar made the robbers gentle'.

In sentences 23-25 underlined participles are used to function as verbal complements. In 26-28 underlined adjectives functioning as verbal complements are used as adverbs and in 29-30 underlined NPs are seen to express the function of verbal complements.

There are also cases where adjectives do not function as adverbs but rather verbal complements.

The following are illustratives :

31. mã ne bacca ko buzdIl banāyā 'Mother made thechild coward'

32. maĩ ne rām ko had se zyādā sharif pāyā 'I found Ram very much gentle'.

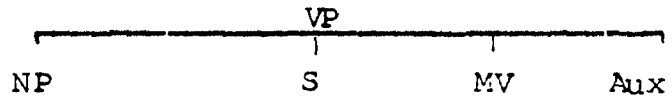
There are, however, cases where embedded sentences can not be seen to be embedded in noun phrases but rather in verb phrases. Sentences embedded in a verb phrase when come to the surface are not noun phrase but verbal complements. It is clear that when a sentence has been embedded directly under the immediate, domination of a verb phrase it is said to be functioning as verbal complement of VP complement.

To generate a verb phrase complement construction in Urdu/Hindi, a sentences is immediately dominated by a verb phrase but not by a noun phrase. In such construction complement sentence simply precedes the MV and follows the noun phrase, under the immediate domination of VP. Verb phrase complement constructions of the sort

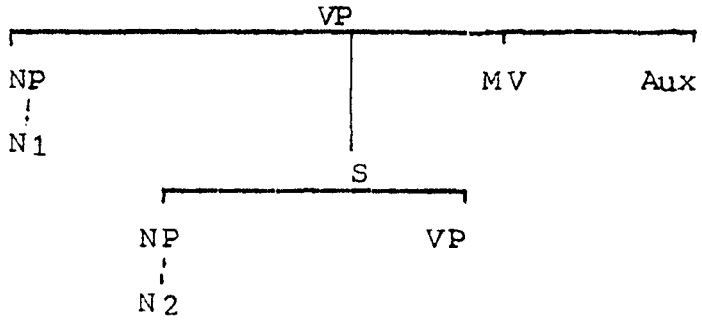
under duscussion are not called intransitive verb phrase complement constructions because they contain object noun phrase. No convincing cases of intransitive verb phrase complements seem to exist in Urdu/Hindi. This can be emerged from the following :

a. a sentence must be immediately dominated by a VP.
b. finite verb must contain the feature transitivity
c. subject of complement sentence must be identical to the object of the finite verb.

It is to be noted that when all these conditions are not satisfactorily met, the process of verbal complementation fails and no well formed sentence is generated. According to new proposal verbal complementation involves the following underlying tree representation :



Since the subject of the constituent S is identical to the object of the finite verb, therefore the given structure the NI and N2 must be non-distinct :



(Where N1 = N2)

For example, the sentences involving the verbal complementation are such as the following :

33. pulIs ne cor ko sef kholte pakṛā

'Police cought thief opening the safe'.

34. latā ko apni kItāb saṛak par paṛi mIli

'Lata found her book lying on the road.

35. latā ne lilā ko akele baiṭhe hue pāyā

'Lata found Lila sitting alone'.

36. baṛhai ne mez acchi banāi, 'Carpenter made the table well'.

37. latā ne Is sāri ko acchā rãgā hai 'Lata has sdyed the saree well'.

38. ramesh ne yeh nāvIl bekar lIkhi hai

'Ramesh has written this novel useless'.

39. rām ne shyām ko āj bahut hi bevaqur banāyā

'Ram made Shyam fool

40. maĩ ne rām ko hameshā pareshān hi pāyā

'I found Ram always to be unhappy'.

41. jantā ne Indrāji ko apnā netā cunā

'People selected Indiraji their leader'.

42. bhārat ki jantā ne Indiraji ko bhārat ka pradhānmantri banāya.

'Indians made Indiraji the Prime Minister of India'.

43. rajni ne apne āp ko sapne mẽ rāni pāyā

'Rajni found herself to be em emporess in the dream'.

In 33-35, sef kholte, saṛak par paṛi and akele baiṭhe hue are participles functioning as verbal complements. In 36-37, acchi, acchā and bekār are adjectives but participate as adverbs to be the instances of verbal complements. In 39-40 bavaquf and pareshān are used as adjectives to function as verbal complement and in 40-43 apnā netā, bhārat kā pradhān mantri and rāni are noun phrases that seem to be functioning as verbal complement.

It is clear that the participles and adjectives as in 34 and 36 agree in gender and number with the object, in case the object is not followed by the post-position ko. Adjectives that do not end on/a/phoneme do not copy the features of the object.

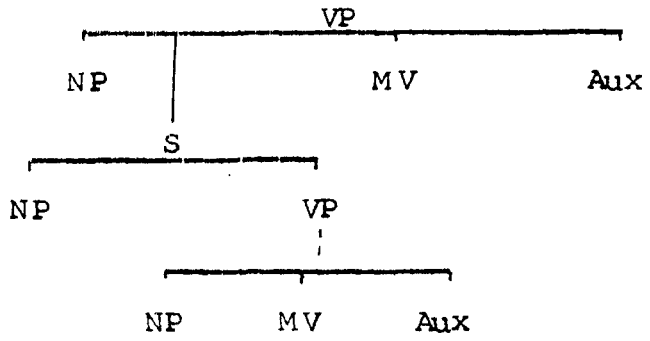
It is clear from an examination of the above examples that on the formal ground rather than functional, a four way distinction is made in terms of verbal complements : participles, adjectives used as adverbs, adjectives and noun phrases. The first is expressed by imperfact, perfect and reduplicated present and past participles. The second and third are expressed by adjectives and the last by noun phrases.

A consideration of the examples under discussion reveals the fact that underlyingly all verbal complements are sentence structures. The participles adjectives and nouns involved in the so called verbal complements are really phrases, rather than clauses. There are, however, cases where it is clearly unsatisfactory to claim that the complement is verbal but not nominal. The question now arises if the status of the complement is ambiguous how can a grammar of the respective languages account for them. A reasonable assumption is as follows : verbal complements are derived as sister constituentes to the verbs rather than as NPs; a second argument that such complement clauses are not NPs, is that they cannot undergo subject raising and the third one fact accounted for by generating a complement clause is that the verb clauses discussed in this section allow only verbal complements in deep structure. It is however, not necessary that the verbs which take VP-complement do not allow NP complement. The number of such verbs that allow both, NP and VP complements is extremely limited.

The following consequences result from an examination of the above examples.

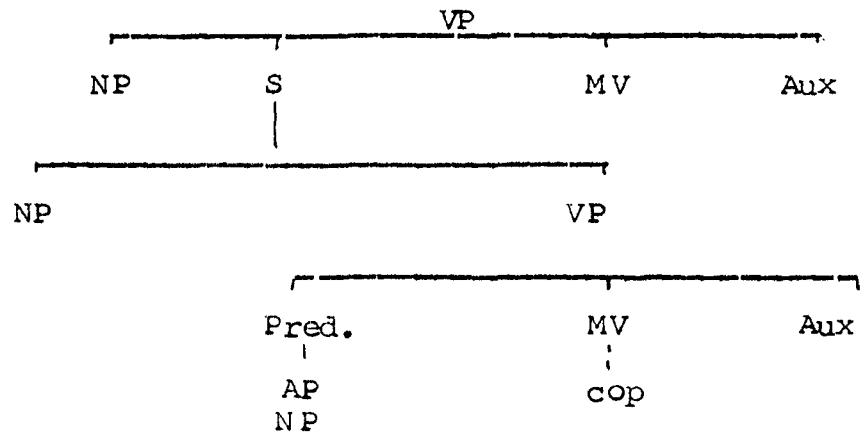
In the verb phrase complement construction only the participle phrase occurs if uthe underlying representation is as that below :

(a)



Sentence 33-35 are given as the instances of the above. In case of the following deep structure, either adjective or noun phrase occurs.

(b)



Sentences 36-43 are the examples of (b) such as above. It is clearly unsatisfactory to claim that the structure of (a) and (b) are identical, the only difference being that the former involves an object and a simple verb and the later a predicate complement and copula as MV.

In addition to the above discussion, several transformations are involved in generating the surface structure of verbal complements. Thus, the VP-complementation involves the following operating rules :

1. EQUI-NP DELETION TRANSFORMATION :

Equi-NP deletion rule is most important and key rule that operates obligatorily in order to derive the verbal complement. This transformation operates and deletes the subject of the embedded S that is identical to the object of the matrix S.

2. PARTICIPIAL TRANSFORMATION :

This transformation applies only to the structure of (a) as mentioned above. This transformation is an obligatory transformation which applies to generate a participle as verbal complement. It operates before the Equi-NP deletion rule.

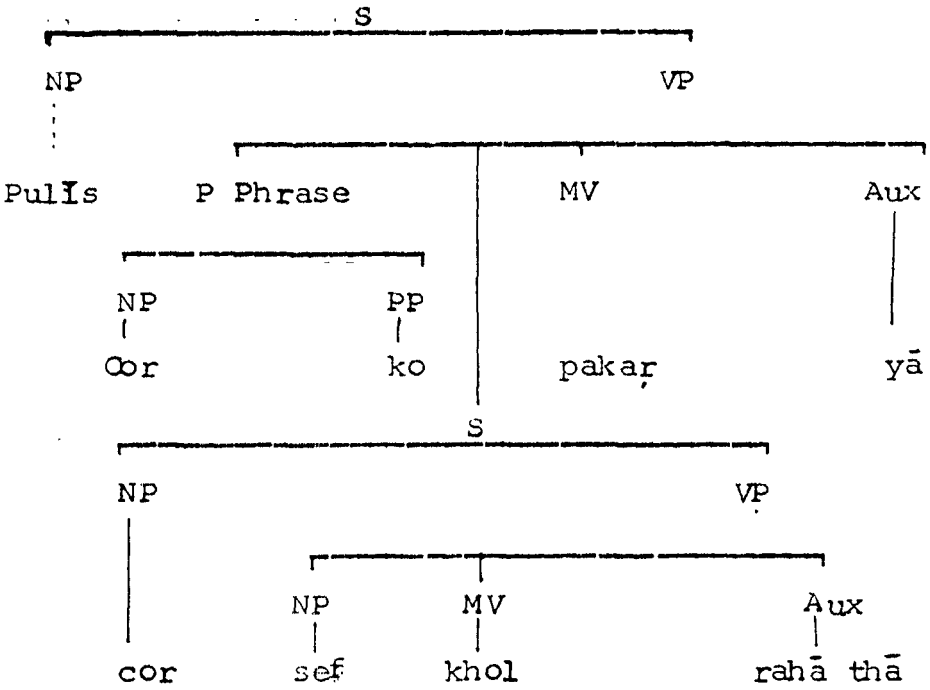
3. COPULA DELETION RULE :

Perhapes the most important and obligatory is the copula deletion rule it self. It applies only to the structure of (b) as above. Copula deletion rule operates after Equi-NP deletion rule.

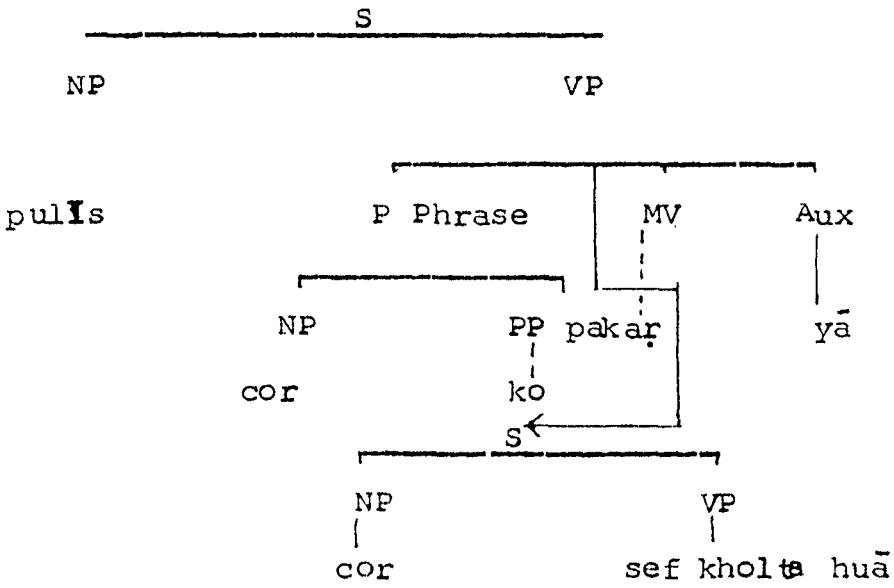
In addition to the above rules, other. T rules will be taken care if they are required.

It would not be irrelavent to apply the above mentioned rules and illustrate how the rules work.

The underlying structure for sentences 33-35 is as follows:



Participial transformation applies changing cor sef kholtā huā, yielding the structure.



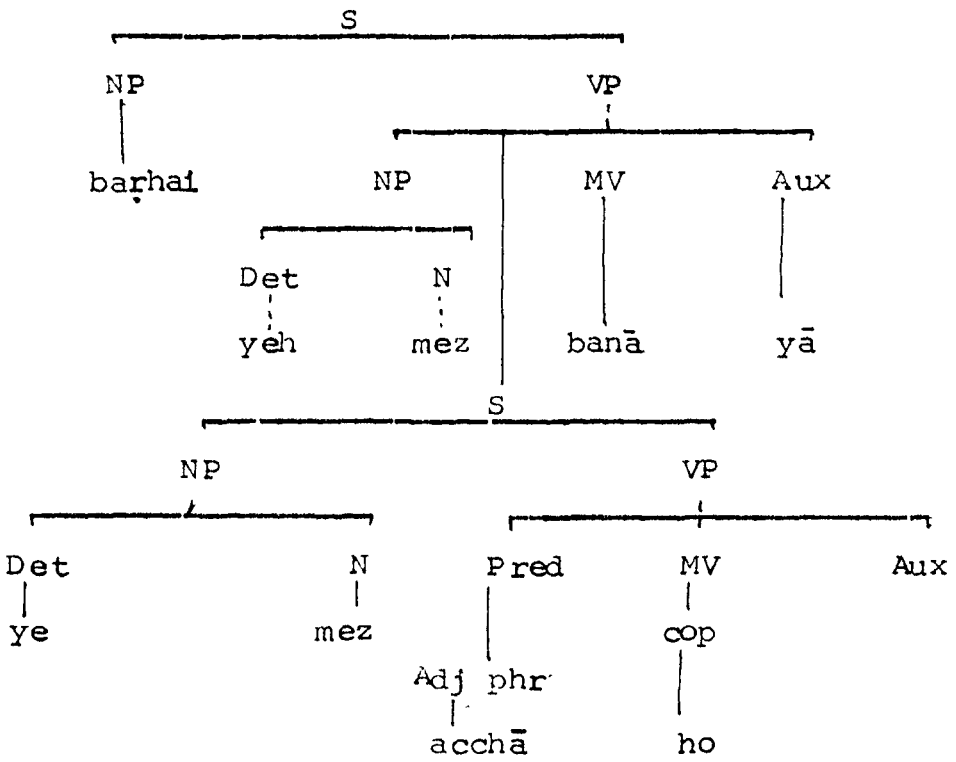
Now equi-NP deletion rule applies to delete the subject NP cor of S2 and S2 ode is erased. After case assignment rule and phonoligical interpretation the obtained structure is such as (33).

Ordering of the rules, therefore, is participial transformation. Equi-NP deletion transformation

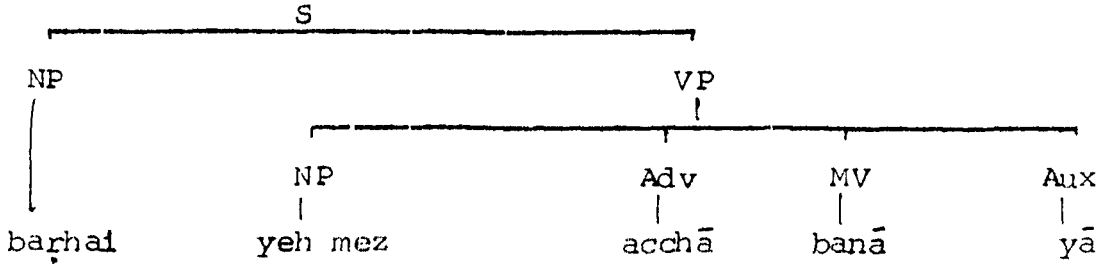
Post cyclic rule : ne placement.

The underlying tree representation of sentences 36-40 is as below :

SENTENCE-36 :



By Equi-NP deletion rule the identical occurrence of subject NP yeh mez of S2 is deleted and by copula deletion rule copula + Aux are deleted. By pruning conditions S2 node is dropped. After above operations, the yeilded structure would look like :



Now agreement rule applies changing acchā banā yā to acci banāi and Case marking rule introduces agentive ne after subject NP barhai to yield the final form of (36).

The transformations applied on (36) are as follows :

Equi-NP deletion

Copula deletion

Agreement rule

Case marking rule

It is not clear that the post positional phrases that function as adverbs such as musibat mẽ'in trouble', ulghan mẽ 'in difficulty' etc. are derived by verbal complementation rule or they originate in the basis.

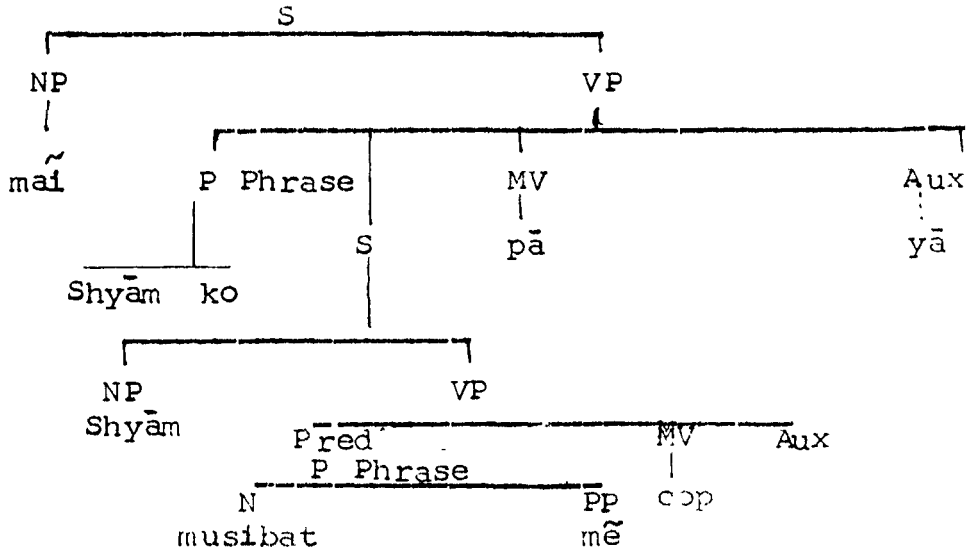
If one makes an attempt to derive these postpositional phrases as verbal complement, they are derived by the same rules that derive the adjective and noun as in 36-43. The underlying structure of the following sentences is as below :

44. maĩ ne shyām ko aksar musibat mẽ pāyā

'I found Shyam often in troubles'.

45. Is bāt ne mujhe uljhan mẽ ḍāl diyā

'This matter threw me in suspense.



Equi-NP and copula deletion rules can apply to yield

maĩ shyām ko musibat mẽ pāyā

Now case marking rule applies in order to derive final structure such as (44).

Sentences containing verbal complement are not ill-formed if they contain passivized or causativized form of their finite verbs. This is illustrated in the following :

46. dIhli mẽ ek pārk bahut xubsurat banāyā gayā hai

47. us ne yeh sāri acchi rãgvāi hai

48. āpne yeh makān aramdeh nahĩ banvāyā.

There is, however, another use of the present participle which has the form V-tehi and means 'as soon as V' for which the subject identily condition is not necessary irrespective of the verbs involved (Kachru 1980:81)6

49. ghar pahũcte hi shushmā ne apni saheliyõ ko phun kiyā.

'Sushma phoned her girl friends as soon as she arrived home'.

50. mere bulātehi voh daur kar āyā.

'He came running as soon as I called.

In 49, the subject idently constraint is clearly satisfied and in 50, the identity constraint is not satisfied since the subject of participle and the subject of finite verb are not identical. In case the identity condition is not satisfied the subject of participle is followed by genitive postposition ka.

In 49, participle functions as time adverb. But in 50 whether it is verbal complement or not,is not clear though it is used as time adverb. If one accepts that it is adverbial phrase and could be derived by the rule of adverbialization then it is not clear

how the genitive post position ka and the form tehi could be derive,on the other hand, the conditions of verbal complementation rule are also not satisfactorily met.

It should be noticed that there are, however, cases in Urdu/Hindi, where, unambiguously we do not determine the underlying from as well as the correct function of the out put. This is mentioned in the following :

51. maĩ rām ko apnā bhāi māntā hũ 'I consider Ram my brother'.

In the above sentence NP apnā bhāi is treated as VP complement (Kachru 1968). On the other hand, Subbarao (1971) and Kachru (1980:94) derives it through the rule of subject, raising.[7] It can be argued that the verbs that provide a choice between a KI-S complement and a phrasal complement, do not allow verbal complement The verb such as mānnā 'accept', lagnā 'feel', samajhnā 'understand' etc allow sentential complements or object complement :

52. mujh ko lagtā hai kI rām bevaqur hai 'It seems to me that Ram is stupid'.

53. mujhe rām bevaqur lagtā hai 'Ram' seems stupid to me'.

Verbs that allow verbal complement do not take KI-S complement This, however, is correct that the exceptions can not be ignored :

54. rām ne sitā ko dukhi pāyā 'Ram found Sita to be unhappy'.

55. rām ne pāyā kI sitā dukhi thi 'Ram found that Sita was unhappy'.

56. rājā ne brahman ko apnā mantri banāyā
'The king made brahman his minister

57*. rājā ne banāyā kI brahman uskā mantri hai
'The king made that brahman is his minister.

It has already been pointed out earlier that the participles in 11-12 do not refer unambigiously either to subject or to object. They infact create ambiguity. This is because, they indicate different senses. For each sense an analyst will have to set up a distinct underlying form which is said to be only the source for specifying the correct function of the out put. Now question arises how an specific sense can be achieved which ever a speaker wants to convey by the sentences similar to 11-12. Is there any way by means of which an specific sense can be determined. There is no convincing answer for this question. In any way even if it is accepted that the participle in (11) refers only to subject similar to the sentences such as below :

58. bacce ne gẽd ko daur kar pakṛā

59, baccā kItābẽ liye saṛak par khaṛā thā.

It poses no problem. However, even if the participle refers only to object such as in 12, we still find that the appropriate function of the participle is not acertained. This is because the verb dekhnā 'see' takes not only the VP-complement but NP-complement as well.

A drew back of this analysis is that there is no way to specify that the participles unambiguously either refer to only subject or object and co-occurrence restruction between participle and either subject or object must be established.

In addition, grammar which does not distinguish between the function of a participle in the sentences

(a) bacce ne cIṛyā ko uṛte hue dekhā

'The child saw a bird flying (uṛte hue = VP-complement)

(b) bacce ne cIṛya ko uṛte hue dekhā

'The child saw that a bird was flying (uṛte hue = NP-Complement) is not descriptively adequate.

From an examination of the above sentence it is clear that the participles used in (a) and (b) refer unambigously only to object. Even than, this, however, is not clear that the participles used in above sentences function as VP-complement or NP-complements.

This is because the verb dekhnā 'see' takes not only the VP-complement but NP-complement as well.

It is noted that unless the correct function of the derived participle is established, no underlying form to which the participle clause attached can be specified.

NOTES AND REFERENCES :

1. Kachru, Y. (1968:59-60). 'Studies in a Transformational Grammar of Hindi'.

2. _____(1968:88). 'Studies in Transformational Grammar of Hindi' and Kachru (1960:81) 'Aspects of Hindi Grammar'.

3. _____(1968:89). 'Studies in a Transformational Grammar of Hindi'.

4. _____(1980:62). 'Aspects of Hindi Grammar' and Kachru (1968) 'Studies in a Transformational Grammar of Hindi'.

5. Subbarao (1971:201). 'Notes on reflexivization in Hindi : Papers on Hindi syntax'. Vol-I, No. 2 and Kachru (1968)54-60). 'Studies in a Transformational Grammar of Hindi'.

6. Kachru, Y. (1980:81). 'Aspects of Hindi Grammar'.

7. _____(1968:59). 'Studies in Transformational Grammar of Hindi' Kachru (1980:94). 'Aspects of Hindi Grammar' and Subbarao (1971:184). 'Notes on reflexivization in Hindi' : Papers on Hindi syntax, Vol-I, No.2.

CHAPTER-VII

CLAUSES EMBEDDED IN THE ADVERBIAL PHRASE

It is, however, not necessary that the sentences embedded in a VP come to the surface as VP-complement. They may yield verbal modifiers in case they appear under Adverbial phrase of VP. Sentences embedded in a adverbial phrase, if depend upon the condition of subject identity, can be governed by the process of 'adverbialization'. By this process, embedded sentences are turned into clauses or participials. Participials which function as verbal modifiers i.e. adverbs modify finite verbs. Participles derived as verbal modifiers are distinct in their forms, though they are similar in thisr function. These could be distinguished by separate terms, such as the following :

1. Participles adverbial phrase
2. Completive participles.

Both, participle adverbial phrase and completive participles will be described, in the following two separate section.

Adverbial clauses are derived through the process of embedding, however, they require a distinct set of operations. To generate an adverbial clause unlike participles, the embedding does not take place on subject identity constraint. The discussion of participles and full clauses will be accounted in the following separate section.

PARTICIPLE ADVERBIAL PHRASE :

In the traditional grammar of Urdu/Hindi, no systematic treatment of participles derived as adverb is available while discussing complex sentences. The status of the participle phrases as an instance of VP-complementation and NP-complementation has been accounted in previous chapters of the work. Thus, the participle functioning as adverb i.e. verbal modifier is considered under subordinate clause which is embedded under adverbial node of matrix clause, and verbal complementation falls under the clause which is embedded directly under the immediate domination of a verb phrase.

The examples of the former are the sentences such as the following :

1. baccā rotā huā āyā 'The child came weeping'
2. rām sharāb piye hue paṛā hai 'Ram is lying having drunk wine'
3. baccā khelte khelte so gayā 'The child slept while playing'.

In the above sentence baccā and rām are subject NPs of matrix S and rotā huā, sharāb piye hue and khelte khelte are verbal modifier derived from embedded S. It is noticed that the term verbal modifier is used to refer to the subject of finite verb hence forth.

Some examples of verbal complements are provided by sentences such as the following :[1]

4. pulIs ne use cori karte hue pakṛā 'Police arrested while he was stealing'.
5. mai ne bacce ko paṛhte hue dekhā 'I saw boy who was reading'.
6. gārd ne gāṛi ko calte calte rokā 'Guard stopped the train which was in motion'.

Where cori karte hue, paṛhte hue and calte calte respectively are instances of verbal complements that modify object NPs of finite verbs.

It will not be irrelevant to state that there are some constructions in Urdu/Hindi that provide ambiguity in the surface structures to specify the correct nature of the out put[2]. This is indicated from the following sentences :

7. shilā ne mã̃ ko rote hue dekhā

'Sheela saw mother while (mother) (Sheela) weeping!

8. pulIs ne cor ko bhāg te hue pakṛā

'Police caught the thief while (Police) running'.

(thief)

9. larkõ̃ ne gāṛi ko calte calte rok diya

'The boys stopped the train while (train/boys) moving!

It is correct that the manner adverbials derived from intransitive verbs in above examples are ambiguous. The adverbials rote hue, bhāgte hue and calte calte do not refer back unambiguously either to shilā, pulIs and laṛke or to mã̃, cor and gaṛi respectively. For at least some native speakers, an unambiguous reference will be signalled by a permutation of manner adverbials with object NP in the surface structure. Further more, it would not be wrong to say that the constructions which are ambiguous in the surface forms will contain simultaneously two different underlying representation. One of them permits the verbal-modification rule and the other verbal complementation rule.

In this section, an attempt will be made to show that the participle adverbial phrases are instances of verbal modification and language creats new adverbials if they are treated as such.

The participle adverbial phrases in Urdu/Hindi may be of the following types :

1. Imperfect participle (V-tā huā) phrase
2. Perfect participle (V-yā huā) phrase
3. Imperfect and perfect reduplicated participle (V-ta +V-ta and V-ya + V-ya) phrases.

The above mentioned forms of participle adverbail phrases can provide the following structure :

(i) V + Imperfect / Perfect +perfect form hua

(ii) V + Imperfect / Perfect +V + Imperfect / Perfect

A participle adverbial phrase is one in which the verb in the embedded clause comes to the surface with either tā + huā or yā + huā attached. If the verb is attached with tā + huā is termed as imperfect participle adverbial phrase, if the verb has the yā + huā attached, the phrase is called a perfect participle phrase. In the case of reduplicated form, if the verb attached with either tā or yā is in reduplicated imperfect or perfect participle adverbial phrase.

The V-ta / * V-ya forms of Urdu/Hindi verbs function as verbal adverbial and hua form of hona is said to adverbialize the v-ta and v-ya forms of verbs.

There is a large class of verbs in Urdu/Hindi that can be transformed to yield imperfect and perfect participle adverbial phrases and also reduplicated phrases. The rule that yields such phrases is described in detail in an other part of this section.

The undernoted sentences and adverbial phrases derived from them, would be as[3] :

10. baccā hãs rahā hai 'The child is laughing

10a. baccā hãstā huā

11. baccā muskarā rahā hai 'The child is similing

11a. baccā muskarātā huā

12. baccā ro rahā hai 'The child is weeping'.

12a. baccā rote rote

13. laṛki soyi 'The girl slept

13a. laṛki soyi hui

14. gaṛi cali 'The train moved'

14a. gaṛi cali hui

15. rām ne sharāb pi 'Ram took wine'

15a. ram sharāb piye hue

16. dhobi ne kapṛe dhoye 'The washerman washed clothes

16a. dhobi bina kapre dhoe hue

17. laṛke ne khānā khāyā 'The boy eat food

17a. laṛkā khānā khāyā huā

18. usne xat likha hai 'He has written a letter'

18a. voh bina xat likhe hue

19. us ne kitāb paṛhi 'He read a book

19a. voh bina kitāb paṛhe

That is, all theverbs such as the ones in 10-19, do not under go the transformation that yields reduplicated perfect participle phrases, only a subclaus of verbs undergoes the transformation that yields reduplicated perfect participle phrases such as the following:

20. bacca baithe baiṭhak gaya 'The child tired because of the constant sitting'.

21. rogi ne leṭe leṭe davā pi 'Patient took medicine lying'

22. voh apni bimār patni ko har jagah hi liye liye phirā

'He carried his ill wife every where'.

23, rām ghar mẽ ghuse ghuse bimār par gayā

'Ram become ill lying in the house'

There are, however, some cases where imperfect and perfect participle phrases are seen not inflected for perfect participle form of hona, such as the following :

24. m

25. sarak par ek kUttā marā parā hai 'A dog is lying died on the road!

26. bacca daurta aya 'The child came running'.

Some examples of participle phrases that are said to require echowords or causal words have to be examined to determine if they are at all related to the types of constructions discussed so far, are given below :

27. bacca khelta khalta xatam ho gaya 'The child expired playing'.

28. fauj larti larāti qile tak pahũc gai

'The army reached the fort fighting'.

Some examples of participle modifier that involve the items in their constructions discussed above are such as :

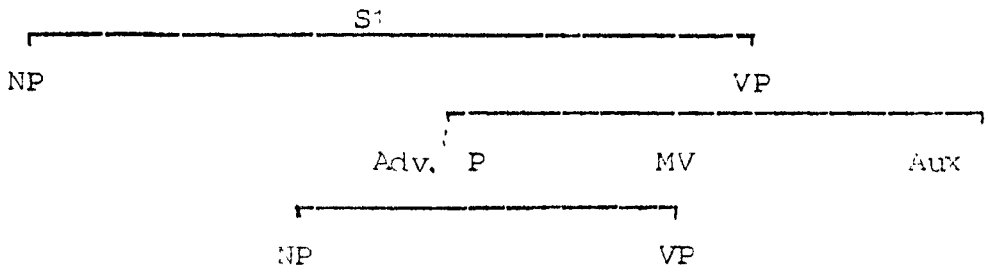
29. bacce ne likhā likhāyā xat phār diyā

'The child turnout the written letter'.

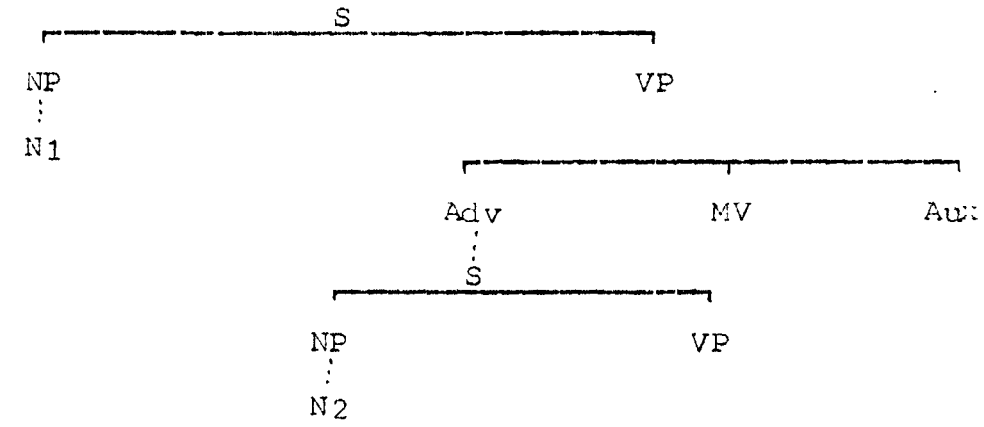
30. kheltā māltā baccā ek minit mẽ xatam ho gayā

'The boy who who was playing died with in a minute'.

The condition for verbal modification to apply, the NP of matrix S and the NP of constituent S must be identical, that is all the sentences containing such adverbial phrases will have the deep structure of the type:



The N dominated by the NP of embedded S and the N dominated by the NP of matrix S must be identical. That is, given the following structures the N1 and the N2 must not be distinct.



The rule supports the claim that the participle adverbial phrases are derived from an embedded sentence, the embedding takes place only if the subjects of both the matrix and embedded S are identical. The rule that generates participle adverbial phrases is termed as 'adverbilization transformation. Where as this rule applies to the underlying structure of a participle

a. participle marker ta hua or ya hua is attached to MV of constituent S.

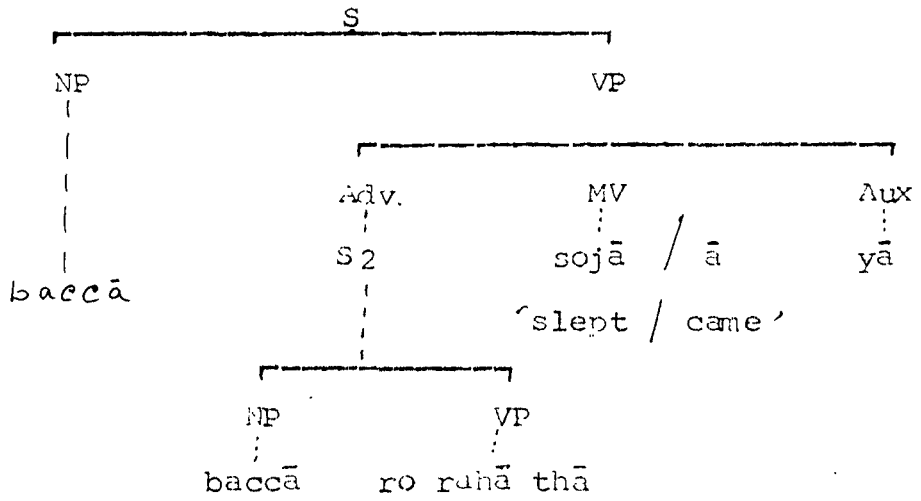
b. It deletes subject N of constituent S.

c. It deletes Aux of the constituent S.

Sentences such as 31 and 32 are derived from underlying structure, such as that given below :

31. baccā rotā huā āyā 'The child came weeping'

32. baccā rote rote so gayā 'The child slept weeping'



The rule of 'adverbialization' applies on S2 cycle to obtain rotā hua/rote rote. If no other relevant transformation is needed to apply, after tree pruning conventions, sentences such as 31 and 32 are generated.

In case the participles are used in the beginning of the sentence, a new rule termed as 'adverbial fronting' takes place after the operation of 'adverbialization, yielding the structure such as the following :

31a. Iskul se āte hue latā ne seb xaride

'Lata purchased apples coming from school'

32a. palang par baiṭhe baiṭhe baccā thak gayā

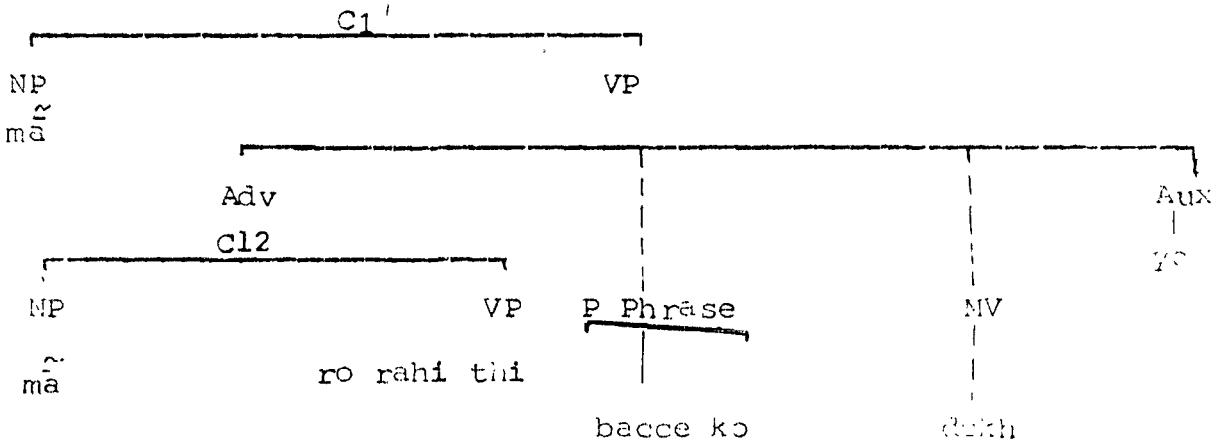
'The child tired because of constant sitting on the cot'

The process of 'adverbial fronting' rule operates in such sentences, on S1 cycle, the derived adverbial phrase from the embedded S is raised to the initial position of matrix S. By tree pruning convention S2 node is erased. After phonological interpretation the surface structure would look like (31a and 32a). In Urdu/Hindi, there are, however, some ambiguous constructions that are the out growth of more than one deep structures like the following :

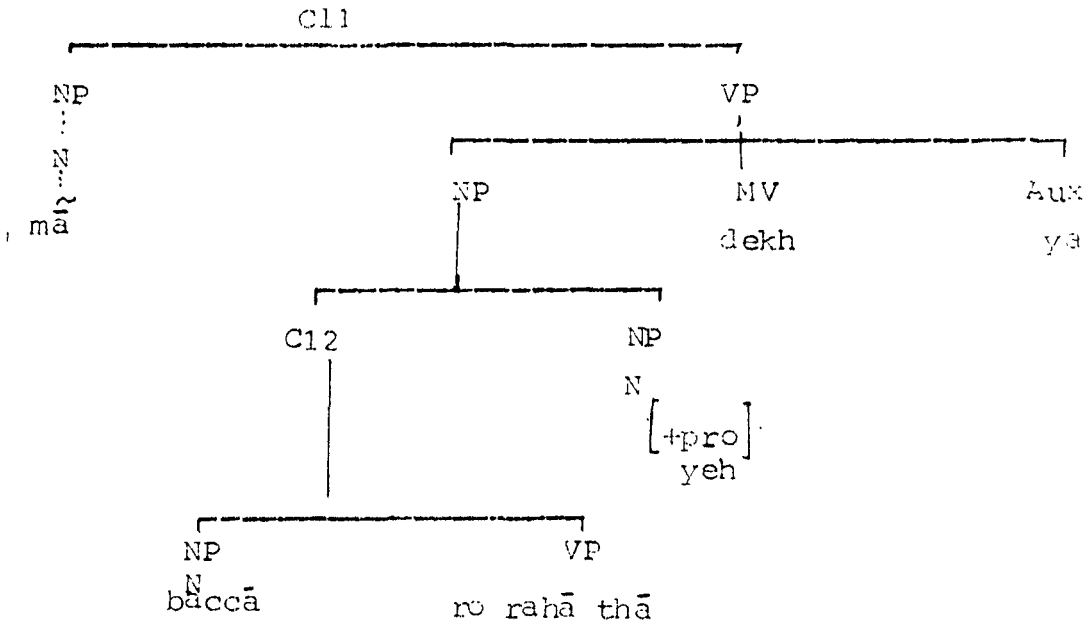
33. mā̃ ne bacce ko rote hue dekhā

a. 'Mother saw the child crying'

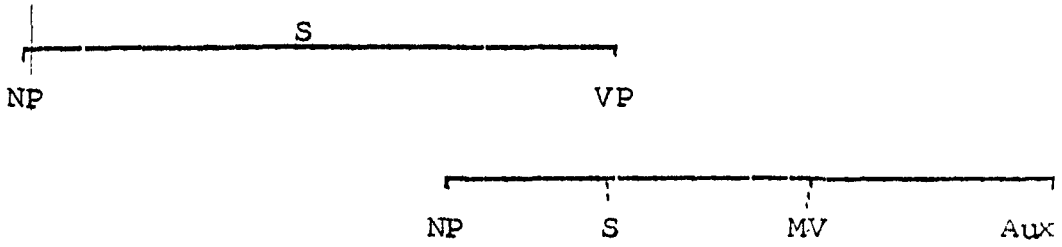
b. 'Mother saw the child who was crying'.



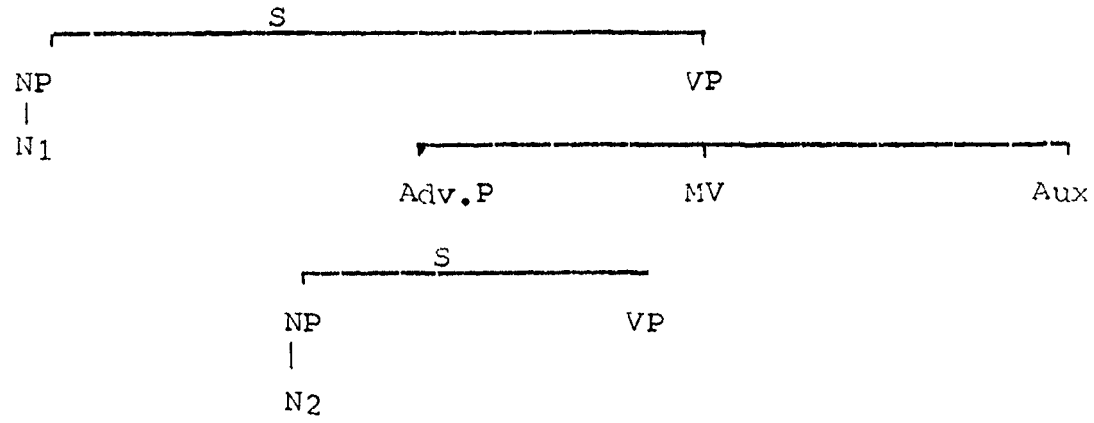
The underlying structure of 33b is



On C1 2 in both cases of 33a and 33b two distinct transformations apply yielding the participle rota hua. In 33 b subject raising rule takes place after participle transformation and then [+Pro] deletion is made, by pruning conventions the surface structure is yielded after dropping C12. But in the case of 33a after adverbialization rule, no significance transformation applies. After dropping C12 node and phonological interpretation the obtained structure is such as 33a. On both 33a and 33b structures different sets of operations take place in the derivation of surface forms. If the verb ro 'weep' in the surface structure of 33 refers to mã̃ 'mother' it will go to the deep structure of 33a but on the other hand, if the verb ro refers to bacca 'child' the deep structure would be different such as 33b. It would not be wrong to state in relation to the construction, discussed above, that the deep structure of 33a is conditioned by subject identity, and 33b by NP-complementation rule. There is however, syntactic (in surface from) identity in the out put but they differ in their underlying structure as well as operating rule. The deep structure of participle derived as verbal modifier differs from the deep structure of NP-complement as mentioned earlier. In case the embedded sentence is verbal complement, if has been embedded directly under the immediate domination of verb phrase, as in the following tree representation:



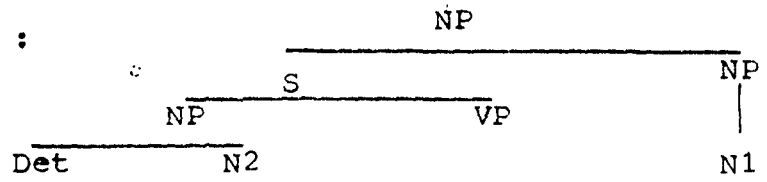
In the light of earlier discussion, it is concluded that the embedded sentence carryout various functions in the sentence and these functions differ in order to depend upon the different syntactic processes of embedding : a sentence that is embedded into Adv. phrase, depending upon the conditions of subject identity and modify the verb of the matrix sentence, is said to be functioning as a verbal modification. This is roughly the deep structure of the following type that is the source of verbal modification.



Note : N1 = N2

When a sentence is embedded in a noun phrase that is not identical to the NP of embedded S, it is said to be functioning as a NP-complement.

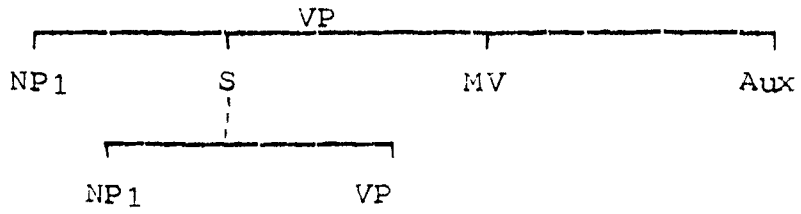
The following deep structure is the source of NP-complementation :



Where N1 is distinct from N2

To generate the VP-complement, the sentences embedded in the verb phrases must contain the subject identical and coreferential

to the object of the finite verb. This is shown in the following tree representation :



This is roughly the deep structure of constructions that are described as performing the function of verbal complements. When a sentence is embedded directly under the immediate domination of a verb phrase, as in the above diagram, it is said to be functioning as a verb phrase complement.

On the other hand, participles derived as adverb by the condition of subject identity, refer only to the subject of the sentence, functioning as verbal modifiers. To consider the examples in support of the above discussion are such as the following :

34. baccā rotā huā ayā 'The child came weeping'

35. pUlis ne cor ko bhāgte dekhā

'Police saw a theif while Police/ thief was running'

36. pulIs ne cor ko sef kholte pakṛā

'Police caught thief while he was opening the safe'.

Participle adverb rotā huā in sentence 34 is an instance of verbal modifier that modifies the finite verb. In sentences 35 and 36 phrases bhāgte and sef kholte are noinstance of nominal and verbal complements respectively. The sentence 35 is of course ambiguous.

Depending upon the context, participles may function as time, manner and reason adverbs. This is illustrated in the following examples[4] :

37. rāmu ne āgra jāte hue sitā ko sāth le liya

'Ramu took Sita with his as the was leaving for Agra'

38. hār liye kharā thā 'Flowerman was standing with gardlands'

39. buḍḍhā baiṭhe baiṭhe thak gayā

'The oldman became tired because of constant sitting'.

In sentence 37, participle is used as a time adverb, in 38, as a manner adverb. The reduplicated perfect participle in 39, functions as reason adverb.

It is correct that if the subject of the participle is not identical, to and coreferential with the subject of the finite verb, the participle is not used to function as adverb - i.e. verbal modifier. The basis for treating participles as adverb is clearly the fact that the subjects of both, matrix and embedded S must not be non identical. In case the subject identity constraint is not satisfacoorily met, the participle must be treated as complement. The derivational process and functions of such complements have been accounted for in some detail in other parts of this work.

There is another use of imperfect participle which has the form V-te hi 'as soon as' V-te mẽ or V-te se for which the subject identity constaint is satisfied :

40. ghar āte hi latā so jāti hai

'Lata falls on bed as soon as she enters the house

41. khāna khāte mẽ usko pyās nahĩ lagti

'He does not feel thursty during eating'.

42. ram sote se ab jaldi uth jata hai

'Ram wakes up early now with sleeping'

There are also cases where perfect participles can be used with a special negative form :

43. bacca bĩna khana khae so gaya

'The child went to sleep without eating'.

The dative subject verb yield perfect participles that occur predicatively[5]:

44. lilā ko bahut pyās lagi hui hai 'Leela is very thursty'.

However, the perfect participles derived from such verbs have the form V-te hi 'as soon as' accordingly.

45. bhuk lagte hi baccā ro ne lagtā hai

'The child begins to cry as soon as he feel hungry'.

Other examples of participles used with post position mẽ/se that obey subject identity constraint were not provided in the recent works, are such as the following :

46. bacca khelte mẽ gir parā

'The child felldown as he playing

47. latā girte se bac gai

'Lata got safty because of not falling down'.

48. shāzi ne sote mẽ ek xuāb dekhā

'Shazi saw a dream which (she was) sleeping'.

49. bacce ne lete se davā pi

'The child took medicine while (she was) lying'.

It can be argued that above examples such as 46-49 show that the PP mẽ/se can be used in place of hua form of hona in the formation of participles.

COMPLETIVE PARTICIPLE :

In addition to there is, however, an other type of structure as participles that are distinct in form but identical in function to the participles discussed so far. This is illustrated in the following examples :

50(1.) mālan gajre liye hue āi 'The flowergirl came with gardlands'.

51(2.) baccā daurta huā āyā 'The child came running'.

52(3.) baccā dudh pi kar so jātā hai 'Having drunk milk, the child sleeps'.

In sentences 1-2, perfect and imperfect participles gajre liye hue and daurtā huā and in 3, V-kar phrase dudh pikar are used as manner adverbs.

It is pointed out that structure containing V + kar form has been given the term as V-kar phrase by Mrs.Kachru in 1971 and in 1980 as 'absolutive phrase[6], on the other hand, Subbarao (1971) following platte (1974) calls such phrases as conjunctive participles[7]. But here and elsewhere in this study such phrases are referred to as completive participle.

Completive participle is formed by adding the completive marker kar to the bare stem of the verb. In transforming verbs to completive participle, the inflected form kar of karna 'to do' is said to adverbialize the verbal form of the completive participle. Completive marker kar can be changed in to ke, e.g. soke 'having slept', karke 'having done' etc.

In case of its attachment with the MV karna 'to do' its conversion is obligatory.

It is to be noted that the use of this marker in pairs such as karke e.g. so karke 'having slept', khā kar ke 'having eaten' is not common in standard Urdu/Hindi.

A careful examination of the above sentences makes it clear that the completive participle and other participles such as in (1-2) seem identical in their behaviour, in order to perform their function in the sentence. Completive participles, like perfect and imperfect participles are derived from an underlying full clauses.

That is, all the underlying embedded sentences containing intransitive and transitive verbs can be transformed to yield completive participles that function as adverbs.

The completive marker is used for various adverbial expression of time, reason or manner. Depending upon the context, completive participle may function as time, reason and manner adverbs. Some examples are provided in the following :

53(4) rām khāna khā kar so gayā 'Having eaten Ram went to sleep'

54(5) latā cāe pi kar hi ṭale gi 'Lata will go after drinking tea'

55(6) bacce ne daur kar mā̃ ko pakṛā 'The child caught mother running'.

56(7) baccā Iskul se ākar kapṛe badaltā hai

'The child changes his dress when he comes from the School'.

57 (8) kalhi ek aurat zIhIr khākar mari hai

'A woman died yesterday after eating poison'.

58 (9) paṛh likh kar rām dāktar ban gayā

'After completion his education Ram became doctor'.

In 4-5 completive participle are used as time adverbs, in 6-7 they express the manner in which the action was performed and in 8-9, the completive participles function as reason adverbs.

It is argued that the distinguishing characteristic of completive participles is that they usually are seen to occur before the sentence as compared with the imperfect and perfect participials:

59 (10) laṛkā daurtā huā āyā 'The boy came running'

60 (11) bacce bInā cāe piye Iskul nahĩ jāte

'The children do not go to school without taking tea'.

61 (12.) dudh pikar baccā so gayā

'Having drunk milk, the child went to sleep'.

62 (13.) Iskul se ā kar latā ne kapṛe badle

'Having came from school, Lata changed his dress'

Reduplicated participles are not distinct from completive participles in this regard :

63 (14.) kapṛe dhote dhote latā pareshān ho gai

'Lata was unhappy because of washing clothes', continuously.'

64 (15.) dInbhar baiṭhe baiṭhe maĩ thak jātā hũ

'I became tired because of sitting whole day'.

It is, however, not necessary that imperfect and perfect participles do not occur in the beginning of the sentence e.g.

65 (16.) bhuk lagte hi voh khā letā hai

'He eats as soon as he feels hungry'.

66 (17.) ghaṛ ko jāte hue latā ne sabzi xaridi

'Lata purchased vegitables going home'

67 (18.) bInā cāe piye latā Iskul nahĩ jāti

'Without taking tea, Lata does not go to school'.

There is some evidence to support the claim that the completive participles seem to be ambiguous in various expression of time, manner or reason. This is illustrated in the following examples :

68 (19.) cāe pikar mujh se parhā nahi jātā 'Having taking tea I can not study'.

69 (20.) mujh ko khānā khā kar nid āti hai.

'I feel asleep, having taken meal'

The completive participles cāe pikar and khānā khā kar 'having taken meal', in 19-20, do not express the function unambiguously either of time, manner or reason respectively.

It is, however, not necessary that the completive participles do not allow reduplication. Like imperfect and perfect participles, they certainly do. The examples of the type are such as the following :

70 (21.) marīz ne tarap tarap kar jān di

71 (22.) baccā ro ro kar pareshān ho gayā

'The child became sad because of constent weeping'

72 (23.) sharāb pi pi kar rām ne apni sehat bigār li

'Ram made worst his health because of drinking wine continuously'

In addition to complete reduplication, the partial reduplication is also possible in Urdu/Hindi. The following are illustrative.

73 (24.) baccā lot pot kar thik ho gayā

74 (25.) rubi ne merā qalam tor tār kar phaik diyā

'After breaking my pen, Rubee threw it away'.

75 (26.) baccā khel khāl kar so gayā

'Having played, the child slept'.

It is noticed again that the adverbial expression of reduplicated completive phrases may and may not be ambiguous.

It is clear from an examination of above sentences that the subjects of completive participle clause and finit verb must be identical. In case the subject of such partiiioles is distinct from the subject of the finite verbs, the process will not yield well-formed sentences :

76 (27.*) rām khānā khā kar mohan so gaya

'Ram having taken meal, Mohan went to sleep'.

77 (28.*) ram Iskul ja kar lata ne us ko dekha

'Ram having gone to school, Lata saw him'

The only exception to this subject identity condition are such as the following in Kachru (1980:83)[8] :

78 (29.) chār baj kar pandhrah mīnaṭ hue haĩ

'It is fifteen after four'

79 (30.) kahani mẽ āge calkar kyā hotā hai ?

'What happens further on in this story' ?

29 illustrates time expression and 30 is idiomatic.

A dative subject sentence, however, does not yield participle phrase although the subject identity condition is satisfied :

80 (31.) xushi ho kar rām mohan se mīlā

'Being happy, Ram met Mohan'.

81 (32.) ɣussā ā kar rām ne usko piṭā

'Being angry, Ra, beat him'.

It is mentioned that if the subject of completive participle and the subject of the finite verb are distinct but the subject of finite verb is possessed N to be a part of the possessor,

either physical or abstract which is identical and coreferential with the subject of completive participle, a well-formed sentence is generated [9]:

82 (33.) rām se mIl kar merā dIl bahut xush huā

'Having met Ram, my heart became very happy'.

In the same case, if the possessed N denotes relationships or concrete possession, an ill-formed sentence is produced :

83 (34.*) maĩ rām se mIla (aur) meri mã bahut xush hui

'I met Ram and my mother become very happy'.

84 (35.*) rām se mIl kar meri m xush hui

'Having met Ram, my mother became very happy'.

It is noted that the 35 is derived from 34, it is ill-formed if 35 is treated as well-formed, it will be derived from the following sentence :

85 (36.) meri m rām se mIli aur meri m xush hui

'Mother met Ram and my mother become happy'.

The following sentence is not well-formed, though it follows the conditions of 33 :

86 (37.) behosh ho kar merā sar phaṭ gayā

'Having faint, my head become injured'.

Notice that the well-formed sentence in the sense of 37 is 38.

87 (38.) behosh hone se merā sar phaṭ gayā

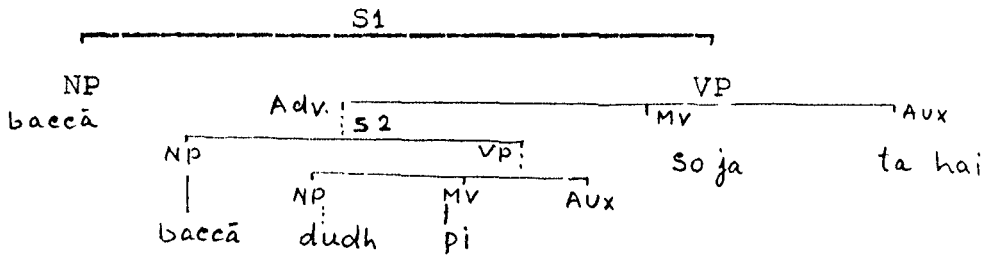
'My head injured to be faint'.

It has been pointed out that the completive participles in Urdu/Hindi are derived from an embedded clause, the embedding takes place only if the subjects of both the higher and lower clauses are identical.

In transforming underlying embedded clause to V-kar phrase or completive participle phrase, the subject NP of embedded clause is deleted and the underlying VP is converted into a completive participle. In the later phase of operation, the completive markers kar or ke is attached to the right of the main verb and Aux element is deleted.

It is, however, not irrelevant to pointout that the same transformational rules that generate the participle adverbial phrases are applicable to generate the completive participial phrases.

The underlying structure of sentences such as 3 is as the following :



Adverbialization transformation applies changing pi to pikar and deletes, identical subject NP bacca of S2. S2 node is erased. The operations that have been performed above, generate the sentence 3.

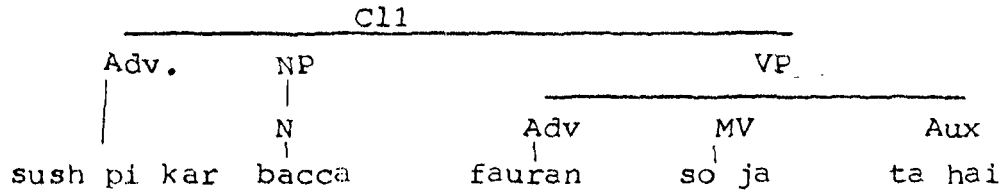
In case the completive participle precedes the sentence such as in 12, the adverbial fronting transformation takes place to move the derived phrase to the initial position of the sentence.

The ordering of transformation, therefore, is :

Adverbialization

Adverbial fronting rule.

By adverbialization and by adverbial fronting the structure is yielded (after dropping C12 node).



It is to be noticed that the embedding of V-ta hua and V-hua and also the V-kar phrases if depends upon subject identity, they are derived by the similar transformational rules. The V-kar phrases always refer to the subject of matrix S. But the participles derived as adverbials behave differently as compared with the V-kar phrases. As an evidence atleast for speakers of Urdu/Hindi ..... ma ne bacce ko rote hue dekha 'Mother saw the child (she/who) was weeping', is ambiguous. For those who have two interrelations of this sentence, the phrase rote hue, if refers to ma 'Mother' i.e. the subject of the sentence, it will be governed by the same process that depends upon subject identity for the purpose of the rules that yield participle adverbials. But on the other hand, if the phrase rote hue refers to bacca that is surface object of the sentence, it will be governed by the complementation rules. It is noted that the derivation of V-ta hue and V-ya hua and also the reduplicated present and past participles if depend

upon the condition of subject identity, they are identical to the V-kar phrases in the interpritation. However, there is semantic distinction between them. But on the other hand, if participles that do not depend upon subject identity, they are interpreted as complements and that refer to the object of the sentence. It can be argued that if the participle refers to the deep object of the finite verb, it is said to be functioning as VP-complement. On the other hand, if it refers to the derived object i.e. the deep structure case agent of the embedded S, it functions as NP-complement. A detailed account of such participle phrases is taken care of in some other parts of this study.

ADVERB CLAUSES :

Besides phrases, there are also cases where full clauses function as adverbs e.g.

88 (1.) voh imāndār hai hālākI voh Xarib hai
'He is honest although he poor'.

89 (2.) maĩ zurur aũgā agar āpne yād farmāyā
'I will come sure if you invited me'.

90 (3.) āp ne bUlāyā thā Isliye maĩ āgayā
'You called me so I came'.

91 (4.) maĩ fIlm dekh ne zurur jāũgā cāhe pItāji kuch bhi kahẽ
'No matter what father says, I will certainly go to see movie'.

92 (5.) baccā ro paṛā jũhi/jaisehi mãne usko ḍãtā
'The child began to weep as soon as mother scolded him'.

93 (6.) baccā ro rahā hai kahĩ bhukā na ho
'The child is crying he may be hungry'.

In sentence 1-6, subordinating adverbs such as halakI, agar, Isliye, cahe and jũlu and the following clauses are used variously to function as adverbs.

Other examples of adverbial clauses that are provided by the sentences are such as the following :

94 (7 a.) rām Isliye bāzār gayā hai kI ām lāegā

b. rām bāzār gayā tākI ām lā sake

'Ram went to market so that he could bring some mangoes'.

95 (8 a.) rām Isliye xush hai kI Uske dost ā rahe hãi

b. rām xush hai kyũkI Uske dost ā rahe hãi

c. cukI ram ke dost a rahe hai Isliye voh xush hai

'Ram is happy because his friends are coming'.

In 7a - 8c subordinate clauses introduced by purposive adverb kI/takI and reason adverb kI/kyũkI/cũkI are used in various adverbial expression of purpose and reason respectively.

It is not controvercial that the above mentioned clauses are complement or not. But this of course is correct that these clauses do function as adverbs.

It is to be noted that the adverbial clauses used in sentences such as 7-8 have their alternate forms as infinitival complements such as below :

96 (9.) rām ām lāne ke liye bāzār gayā hai

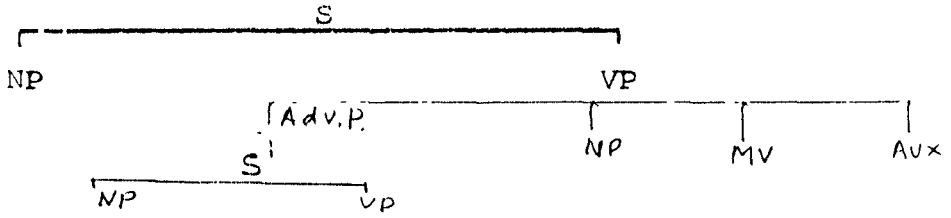
'Ram went to market to bring mangoes'.

97 (10.) rām apne dostõ ke āne se xush hai

'Ram is happy because of coming his friends'.

This, however, is necessary to mention the fact that the sentences embedded under immediate domination of adverbial node of higher S come to the surface as phrases or even full clauses.

It is noticed that the underlying tree representation of phrases as well as adverbial clauses is not distinct. This is illustrated such as the following :



However, the derivational process that yields phrases i.e. participles is conditioned by subject identity of both matrix and constituent S. On the other hand, at any stage of derivation, the process that yields subordinate adverb clauses does not depend on the subject identity constraint.

It is noted that the subordinating conjunctions/adverbs in Urdu/Hindi, have wide range of meaning, however the most common types alongwith their correlative forms are as follows : (For deail, see Kachru 1980:138)[10].

(1.)	Isliye - kI, takI	'So that'	- Purpose
(2.)	jaisā-vaisā, jistarah-Usitarah	'As-the same'	- Manner
(3)	kyū̃-kI, cū̃ki-Isliye/tabhi to	'Because, Therefore	- Reason
(4.)	hālā̃kI-magar/phIrbhi yadyapi-tobhi	'Although-evenso'	- Concessive
(5)	yadi, agar-to	'If-then'	- Conditional
(6.)	cahe/xuah		- Contradictor
(7.)	Isliye, so, ateh, ateva/ aisā, itnā-kI	'That's why'	- Result
(8)	jū̃hi, jasehi-fauran Isse pahle/qabl Iske, Iskebad, phIr	'As soon as-sudden' before it and afterwards	- Temporal

Subordinate clauses refer to various adverbial expression of purpose, manner, reason, condition etc., in case they are introduced by such adverbs. The following examples are considerable :

98 (11.) voh jaldi sotā hai tākI jaldi Uṭh sake

'He sleeps early so that he could get up early'.

99(12.) voh pareshān hai kyũkI uskā beṭā bimār hai

'He is unhappy because his son is ill'.

100 (13.) maĩ ne apnā kām usi tarah kiyā jIs tarah maĩne cāhā

'As I liked, I did my work'.

101 (14.) rām fel ho gayā hālãkI usne bahut mIhnat ki

'Ram could not pass the exam although he worked very hard'.

102(15.) āpko saza mIlegi agar āp Iskul nahĩ jāte

'You will be punished, if you do not go to school'.

103(16.) āpne bulāyā thā Isliye maĩ ā gayā hũ

'You called me that's why I have come'.

104(17.) maĩ Iskul nahĩ jāũgā xuah/cahe/bhalehi mujhe āj khānā na mIle

'No matter I do not get food, I will not go to school today'.

105(18.) āpne bacce ko tanhā choṛ diyā hai kahĩ ḍar na jāe

'You have left the child alone (I am afraid) he may be'.

Sentence 11, contains adverb of purpose takI, 12 contains adverb of reason kyũkI 13 contains manner adverb and its correlative form such as usi tarah...jIs tarah sentences 14-15 contain adverb of concessive and condition such as hālãkI and agar respectively. In 16, Isliye refer to result expression and in 17-18 xuah/cahe/bhalehi and kahĩ-na indicate adverbial expression of

of contradiction and apprehension respectively. It is to be noted that purposive sub. clauses occur in the opative mood. Matrix s with the conditional subordinate clause does not allow perfect aspect.

Note that Itna-kI can be used for adverbial expression of result, too, such as :

106 (19) Usne Itnā kām kiyā kI thak gayā

'He worked so much that S why he became tired'.

Generally, jũhi/jaisehi - fauran are used for time. But, in some cases, jũhi/so may be used to express the action of result.

107 (20) baccā fauran āgayā jũhi mā̃ ne bulāyā

'The child come at once as soon as mother called'.

108 (21) baccā xush ho gayā jũhi maine bIskIṭ usko diya

'After having taken biscuit, the child became glad'.

109 (22) āpne yad farmāyā so maĩ ā gayā

'You asked me to, that's why I did come'.

However, the distinguishing characteristic of adverbial clauses is that the subordinating adverb and the following clause can be shifted to the first position in the sentence and an optional appropriate correlative of the adverb is introduced before or at any proper place of matrix clause. The following examples illustrate this :

110 (23) hālā̃kI voh ḡarib hai magar imāndar hai

'Although he is poor, but/even though he is honest'.

111 (24) kyũ kI voh bimār hai Isliye Iskul nahĩ jātā

'He does not go to school because he is ill'.

112 (25) agar āpne bulāyā to mai zurur aũgā 'If you called me I will certainly come'.

It is to be noted that if, however, the subject identity constraint is not obligatory one in the derivation of such sentences. Even so, subject of either clause can be deleted via deletion transformation, if needed :

113 (26.) voh imāndār hai hālākI ɣarib hai

'He is honest although he is poor'.

114 (27.) hālākI voh ɣarib hai magar imāndār hai

'Occasionally either sub-adverb or its correlative can be deleted from either clause by transformation e.g.

115 (28.) voh ɣarib hai oor nahī

'Although he is poor, even still he is not thief'.

116 (29.) voh bimar hai Isliye nahi aya

'He is unwell, therefore he did not come'.

117 (30.) jaisa mujh se ho saka maī ne kar diya

'I did, as I could do'.

It should be mentioned that there are, however, cases where subject NP may be pronominalized from either clause, by transformation, if needed. This is clear from the sentences such as 8a-c.

The process of adverbialization, thus involves the following operating rules :

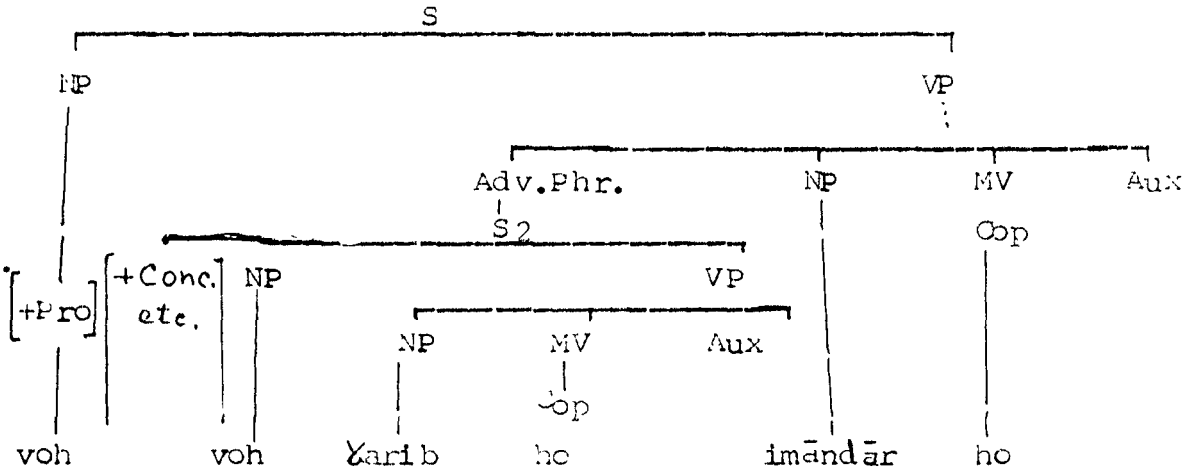
1. sub-adverb placement rule
2. Extraposition transformation
3. Adverbial Clause Fronting rule

The rule of sub-adverb placement/insertion applies onligatory on clause 2. It introduces subordinate (sub.) adverb either before or at any proper place in the clause.

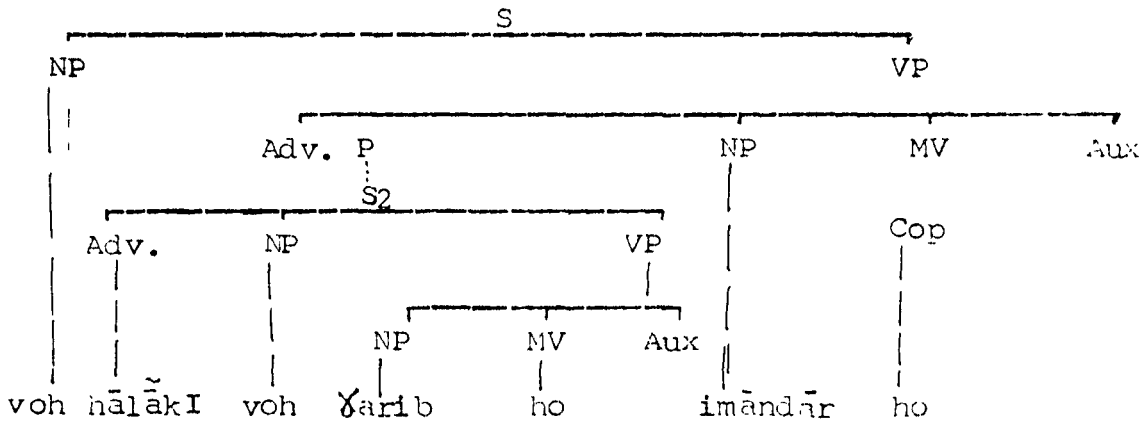
Extr position transformation applies after the operation of adverb insertion. It moves the adverbial clause to the final position of the sentence. It is an optional rule. It applies only in case the adverbial clause occurs in sentence final position.

The rule of 'Adverbial clause fronting' is also an optional rule. It takes place, just after adverb placement transformation. This rule moves the adverb and the following clause to the initial position of the sentence.

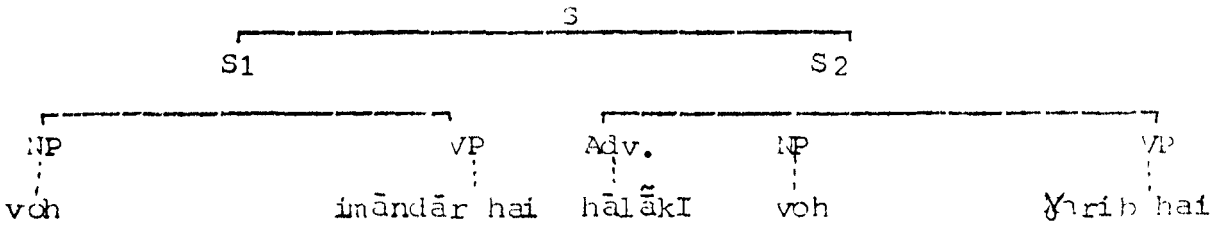
The underlying structure of sentences such as 1-6, is as follows :



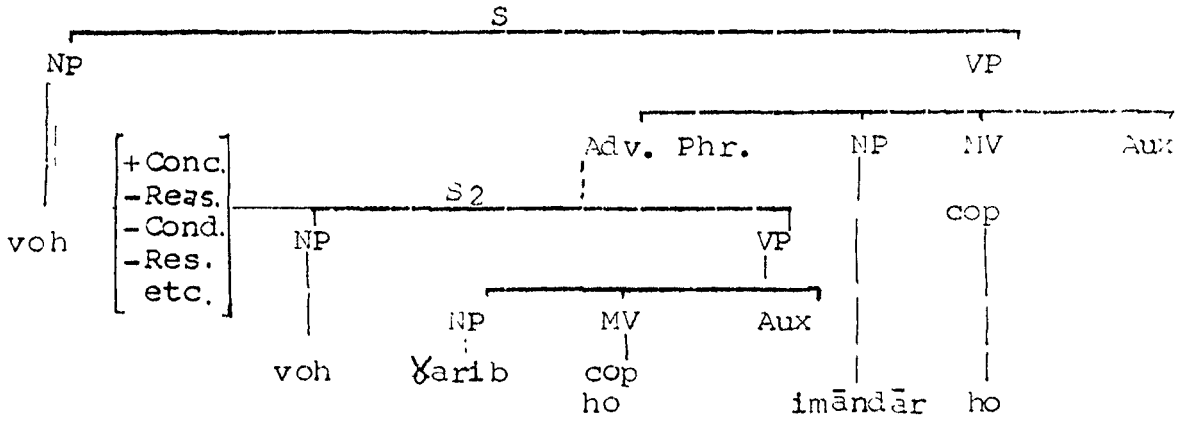
The yielded structure via 'Adverb Placement rule, looks on follows :



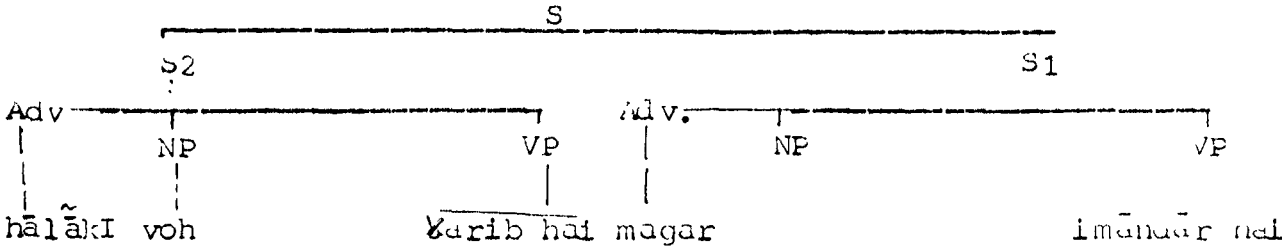
By extraposition S2 is moved to the final position of the sentence. After agreement transformation and phonological interpretation, the surface structure of sentence (1) would look like the following:



It is noted that if, however, an adverbial clause occurs in sentence initial position, it is derived from the similar base. The deep structure of sentences such as (23) is given below :



After the rule of 'Adverb placement' the rule of 'Adverbial clause fronting' applies and moves the S2 to the initial position of the sentence. After phonological interpretation the surface structure of (23) would look on follows :



It can be argued that the subject NP of S2 is deleted by equi NP deletion rule only because the subject NPs of both sentences are identical.

The fact may be emerged from an examination of the above examples that the adverbaal clauses have two distributional occurrence and may take one of these two : either adverbial is preceded or followed by matrix clause.

Before the discussion of adverbial clause is concluded, sentences such as the following have to be examined to determine if they are at all related to the types of constructions discussed so far :

118 (31) voh mar cukā thā jab maĩ pahũcā

'He had died when I reached'.

119 (32) maĩ vahā̃ gayā thā jahā̃ rām rahta hai

'I went there where Rām lives'.

120 (33) jab maĩ pahũcā voh mar cukā thā

'When I reached he had died'.

121 (34) jahā̃ rām rahtā hai vahĩ maĩ rahtā hũ

'Where Ram lives I live there'.

The sentences 31-34, however, differ in their derivation from the sentences such as 1-6 and 23-25. The sentences 31-34, unlike the sentences 1-6, are derived through the process of substitution. Thesentences 21 and 33 contain adverb of time jab 'when', and sentences 32 and 34 contain adverb of place jahā̃ 'where'. The sentences such as 32-34 contain a matrix and an embedded clausei.e. the time or place adverbial and the following clause which embeds in the matrix clause.

The adverb of time and of place look very much like sub-adverbs. However, there are several differences. The adverb of time and of place cannot undergo the 'sub-adverb insertion rule'. Thus, the following sentences are ungramatical when we attempt to apply this rule :

122 (35.)* voh mar cuka thā jab maĩ us vaqt pahũcā

123 (36.)* mai us jagah rahtā hũ jahā̃ voh us jagah rahtā hai

The rule that inverts the two clauses in a sentence such as in 33-34, is very similar to the "adverbial fronting rule". The examples that seem to be identical in their structure are compared such as the following :

124 (37) jab maĩ pahũcā voh mar cukā thā

125 (37a) halā̃kI voh Xarib hai magar imāndār hai

126 (38) jahā̃ maĩ rahtā hũ vahā̃ ram rahta hai

127 (39.a) agar āpne madu kIya to maĩ zurzr aũgā

'If you invited me I would certainly come'.

It is clear from an examination of earlier discussion that the sentences 37-38 behave differently as compared with the sentences 37a, 38a. The sentences 37, 38 and 37a, 38a are distinct in their derivational base as well as in the ways by which adverbials are introduced before the respective clauses.

It is unnecessary to study in detail the treatment of adverb of time and of place, in the present discussion. They have been taken care of in another part of the work. In these lines an attempt is made to show that the clauses functioning as adverb of time and of place are distinct in their derivation as well as in their internal structure as compared with the adverb of reason, concession and of condition etc.

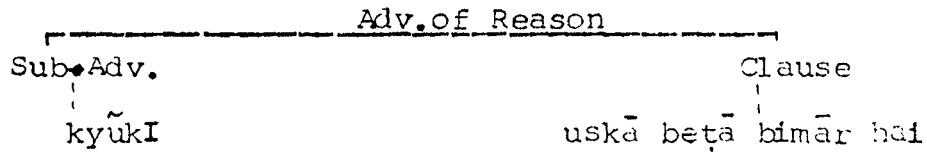
The clauses which are introduced by the subadverbs or the adverb of time and of place are referred to sentential adverbs. They denote the action of the verb phrase of the non-adverbial clause in respect of time, place, manner, cause or any other adverbial idea.

The preceding adverbials and the following clauses which are governed by the process of embedding are converted into adverbial clauses. From structural point of view the adverbial clauses are kept into two groups :

1. The clauses functioning as adverb of reason, manner, concessive and of condition etc. are introduced by the subadverb which occurs as an external unit of the clause concerned, such types of adverbials consist of two subcomponents :

a. Subadverb and

b. A following clause, for instance :



2. The clauses that function as adverb of time and of place are introduced by these adverbs through the process of substitution. The introducing adverb appears to be an internal constituent in the deep structure of an embedded clause and shifted to the first position of an embedded clause by substituting an appropriate relative adverb (jab 'when', jahā̃ 'where' etc.) of time and place expression by a transformational rule.

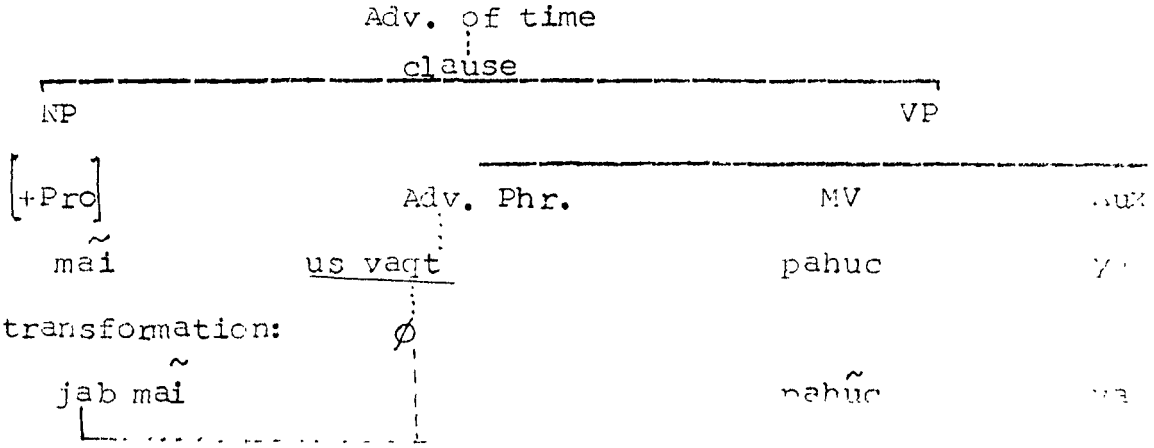
The deep structure of the following embedded clauses and the surface structure derived from them is as :

mãĩ us vaqt pahũca.. => jab mai pahuca

'I reached at that time when I reached'

rām us jagah rahtā hai ==> jahã̃ ram rahta hai

'Ram lives there where Ram lives'.



To sum up, most cases of adverbial clauses turn out to be gramatically quite different. They are discussed in other part of this work.

The adverbial clauses functioning as adverb of time and place have been derived by the process of relativization, others are simply cases of insertion transformation.

It is obvious from this preliminary discussion that the question of adverbial clauses in Urdu/Hindi needs further investigation.

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3. Kachru, Y. (1968:58). 'Studies in a Transformational Grammar of Hindi'.

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PART-THREE:

CLAUSES COMBINED BY THE CONJOINING RULES :

The conjoining rules generate a new complex sentence (usually called compound) by combinding two or more independent clauses/ sentences that are of gramatically equal or coordinate rank. The clause combinding rules that generate a conjoined sentence to combine two clauses together, are called conjoining rules.

The process that generates a conjoined sentence combines two or more clauses in such a way that one is not subordinated to the other. The process that joins two clauses together, can be examined in the following different ways : (1) coordination and (2) comparision.

In chapter eight, coordination deals with the ways of joining two clauses together that are placed side by side with a coordinating conjunction (aur 'and', ya 'or', lekin 'but' etc.) between them or at any needed place.

Chapter nine concentrates on the process of comparision which is merely concerned with two distinct types of degrees : comparative and superlative. Both comparative and superlative constructions are derived by combining two clauses together with the help of comparative joining items.

CHAPTER-VIII

COORDINATE CONSTRUCTIONS

Sentences that involve two or more sentences/clauses joined together with a coordinating conjunction are called conjoined or compound sentences.

To generate a conjoined/compound sentence two or more independed clauses are kept side by side and a coordinating conjunction is placed between the clauses or at any proper place.

It is noticed that if we restric to two clauses joined together, the conjunction that joins the clauses appears between them. The examples are given such as the following :

1. rām ne khānā khāyā aur mohan ne cāe pi

   'Ram ate food and Mohan took tea'

2. rāj āega yā maĩ jāũgā

   'Raj will come or I will go'

3. maĩne rāmko bulāyā thā lekin mohan āgayā

   'I called Ram but Mohan came'

If there are more than two clauses joined together, a coordinate conjunction is placed before final clause. For example the sentence such as below is given :

4. rānā ne bartan sāf kiye, lilā ne kapṛe dhoye aur shilā ne khānā banāyā

There are also cases, where a coordinate conjunction does not occur in a sentence that contains more then two conjuncts.

5. laṛke, larkiyā̃, bacce, sab cale gaye

   'Boys, girls, children, all went'.

6. rām, mohan, lilā, shilā, har ek jānā cahta hai

'Ram, Mohan, Lila, Sheela, every one wants to go'.

It is to be noted that the underlying clauses joined together with a coordinator such as aur and', if contain non-identical items in their respective base yield only full clauses in the sentence. On the other hand, if they contain identical items, similar in meaning and function, yield compound phrases with in the sentences.

7. shilā gārahi thi, lilā nāc rahi thi aur bacce Xush horahe the

'Shila was singing, Lila was dancing and children were becoming happy'.

8. rām aur mohan so rahe the

'Ram and Mohan are sleeping'.

9. latā ne seb aur angur khāe

'Lata ate apples and grapes'

10. shilā nācti aur gāti hai

'Sheela dances and sings'

Sentence 7 is an example of former statement and sentences 8-10 are instances of later.

It is clear from the above discussion that a conjoined/compound sentence, contains either full clauses such as in sentence 7 or compound phrases such as in 8-10.

It should be mentioned that the items thatjoins the clause and their parts have variously been referred as conjoining particles, conjunctions, coordinate conjunction cordinators etc. and the clauses and their parts that are joined to each other are traditionally known as conjuncts. Even the conjoined sentences that involve clauses of equal grammatical or coordinate rank are referred to as

coordinate sentences that is why the process that yields such structures is termed as coordination.

The coordinate conjunctions or coordinators along with their correlative forms are classified in the following categories. (See Kachru : 1980:144, for details)[1] :

1. Conjunctive coordinators

   aur, va, o, evam, tathā 'and'

2. disjunctive coordinators :

   yā, athva, kI 'or' yā (to) yā, xuah - xuāh, cāhe-cāhe 'either-'or'

3. negative disjunctive :

   na, nahĩ to, varna :'Neither, otherwise' , na (to) na : neither - nor'

4. Adversative coordinator :

   lekin, magar, par, parantu, kIntu 'but' balkI 'on the contrary'

In terms of coordinators, coordinate sentences are divided in the following types :

1. Conjunctive 2. disjunctive 3. negative disjunctive and 4. adversative.

In a conjunctive sentence a clause is simply added to an other, by a coordinator aur 'and':

11. rām ne khānā kāyā aur mohan ne cāe pi

    'Ram took eat and Mohan drank tea'.

In a disjunctive sentence, the coordinator such as yā 'or' expreses disjunction between clauses and semantically a choice between statements is offered for acceptance.

However, when both astatements are denied a negative disti disjunctive coordinator such as na or na - na 'nor - neither' is

used in such a sentence. The examples are below :

12. latā xud ā ja egi yā maĩ naukar ko bhej dũ

'Lata will come herself or I should send the servant'

13. voh ā gayā nahĩ to maĩ jātā

'He has come otherwise I would have gone'.

14. latā mã̃ ke pās jāti hai na mã̃ hi uske pās āti hai

'Lata goes to her mother nor mother comes to her'.

In an adversative sentence one clause expresses opposition or contrast to another by a coordinator such as lekĪn 'but' or its equivalent.

15. maĩne lilā ko bulāyā thā lekIn shilā āgai.

'I called Leela but Sheela come'

16. rām dIhli nahĩ jāegā balkI āgre jāegā

In addition to, a persian conjunction such as vao to be pronounced, similar to/is used in urdu to join to noun phrases and adjectives specially of persian origin to express the meaning and function parallel to conjunctive coordinator such as aur 'and'. This is illustrated in the examples :

17. yeh laṛki behad hasin-o-jamil hai

'This girl is most beautiful and lovely'.

18. rām apni mã̃ par dIl-o-jān se qurbān hai

'Ram loves her mother from the depth of his heart'.

Conjunction shift that converts aur 'and' to ke sāth 'with' as jacobs and Rosenbaum (1968:259) and Kaul (1975 : 201)[2] have proposed, is not justified in coordinate sentences[3]. The following examples are considerable :

19. rām aur mohan lar rahe haĩ

'Ram and Mohan are quarreling (with another)'.

20. rām mohan ke sāth larrahā hai

'Ram is quarreling with Mohan'.

It is noted that sentence (20) is not coordinate sentence and even the derived structure such as rām mohan ke sāth is not a compound noun phrase. rām is a subject N and mohan ke sāth, a post positional adverbial phrase, derived through the same base that derives a simple declarative sentence.

In Hindi, both imperative - declarative sequences are possible, but an explict marker of additive type (say aur in Hindi) is not tolerated (Dey : 1975):[4]

21. ghar jao, maĩ tumhẽ pãc rupye dũgā

21.a. ghar jāo, aur maĩ tumhẽ pãc rupye dũgā

'Go home, (and) I will vgive you five rupees'

It is to be noted that sentences such as (21) can refer at least two semantic interpretation, if we accept above proposal. Sentence 22 is compared from 21 :

22. ghar jao uske bād/phir/Isliye maĩ tumhẽ pãc rupye dũgā

Sentence 22 is derived through the process of subordination and subordinate adverb introduced in 22, can be dropped optionally, That's why it is correct to mention that the sentences such (21) is not free from semantic ambiguity.

This however, is not correct that imperative and declarative can not be conjoined : tu yahĩ baiṭh maĩ tereliye abhi khānā lātā hũ.

'Thou sit here, I just bring food for thee

First the problems involved in the conjunctive compound sentences will be discussed and subsequently other coordinate sentences will be accounted.

The process of coordination, thus involves the following operations :

1. Conjoining transformation
2. Deletion transformation

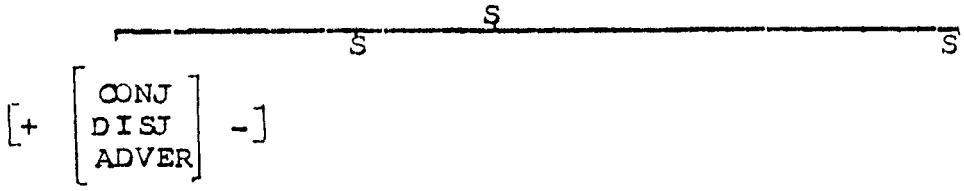
The rule of conjoining operates on the deep structure to join two or more sentences obligatorily. It introduces a conjoining item or coordinator aur 'and' between the two conjuncts or at any needed place and deletes a pre- S constituents that provides a semantic specification of the sentence.

The deletion rule operates optionally after the operation of conjoining. It deletes constituents that have identical reference in terms of meaning and function, from either clause conditionally.

For convenience both, conjoining and deletion are collapsed into a single process and sub-sumed under one rule termed as coordinate conjoining deletion (CCD). However one of them is an obligatory rule and the other an optional.

It is to be noted that the rules of coordinate conjoining deletion operate recursively and generate different types of coordinate structures that involve compound clauses, parts of clauses, compound NP, VP, AP and on. However, two phrases such as subject and object cannot be conjoined to yield compound phrase.

In deep structure of the coordinate sentences in a much over simplified form would look on follows :



In general, there are following types of coordinates sentence structures possible in Urdu/Hindi :

i. No deletion takes place in conjoined sentences.

ii. Identical items are deleted from second clause.

iii. Identical items are deleted from first clause.

iv. Identical items are deleted from more then two clauses except final.

v. Identical lexical items are deleted from both, first and second clauses.

vi. Identical items are deleted from following clauses except first.

vii. Identical items are deleted from each clause, if however, more than two clauses are conjoined.

It is noted that structure-I, contains full clauses, str-ii, yields, compound verb phrases in the sentence, (iii) derives compound NP and a part of a clause in the sentence, (iv) contains more than two noun phrases in the sentence (V) generates either a compound object NP or a part of a clause in the sentence, structure (VI) yields more than two verb phrases in the sentence and (vii) produces object NPs.

We can not account for the structures of the type I-VII mentioned above, if we agree to Koul's argument that "in general, there are three types of coordinate conjunction structures possible in Hindi (Koul 1974:14)[5]:

1. Where no identical lexical items exist in the sentences which are conjoined.

2. When by transformation, identical lexical items in the second sentence are deleted and some morphemes are added to form a conjunction.

3. Where by some transformations identical lexical items are deleted in the second sentence (emphrases added).

Some examples that are provided by the structures such as I-VII, mentioned above are such as the following :

23. I. rumā bartan sāf karegi aur zebā khānā banāegi

'Ruma will clear the pots and Zeiba will cook the food'.

24. II. zebā ne khānā banāyā aur bartan sāf kiye

'Zeba cook food and cleaned the pots.

25. III. rām aur mohan dehli jā rahe haĩ

'Ram and Mohan are going to Delhi'.

26. IV. rumā, zebā, foizi aur shāzi ne fĩlm dekhi

'Ruma, Zeba, Fauzi and Shazi saw the movie'.

27. V. rām ne ām aur seb khaye

'Ram ate mangoes and apples.

28. VI. kamāl Iskul se āyā, kapṛe badle , khānā khāyā aur so gayā

'Kamal comes from school, changed dress ate food and went to sleep'.

29. VIII. rām ne ām, kela, amrud aur seb khāye

'Ram ate mangoes, bananas, guavas, and apples'.

Examples given above show that deletion does not take place only on second clause as Koul (1974) and Lester (1971) have proposed[6]. It takes place on either clause under certain identity constraint It is to be noted that order in which the deletion takes place depends on the order of the constituents.

Ross (1967 a) imposed meta theoretical condition, the directionality constraint (DC), on gapping (a rule that deletes infinitely many occurrences of a repeated verb in coordinate sentence). The DC states the following :

The order in which gapping operates depends on the order of elements at the time that the rule applies, if the identical items are on the left branches, gapping applies forward, if they are on the right branches, it operates backward (Ross, 1967 a : 5).[7]

Koutsoudas (1971) and others argued that "DC holds not only for verbal reductions but also for all other reduced coordinations as well".

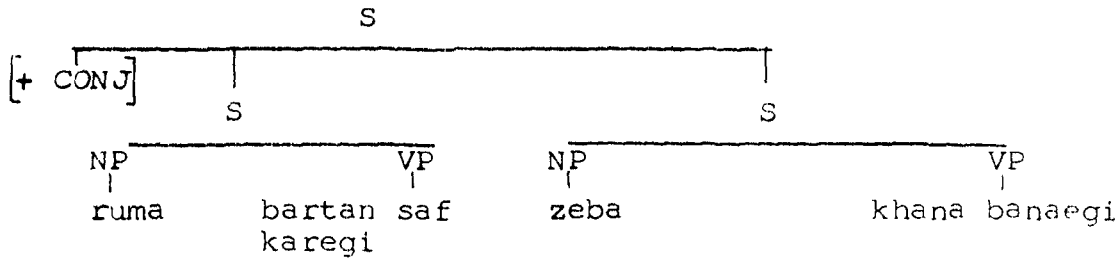
A sentence is branched into NP and VP, NP is on the left branch and VP on the right branches. "The deletion is however, a complicated process commonly known as "conjunction reduction (CR)" which reduces coordinate sentences by : (i) raising an identical constituent (ii) deleting all lower identical repetitions of the same constituent (iii) pruning non-branching nodes and (iv) relabling constituents to yield an A-over - A structure (Koutsoudas 1971:337)[8]. However, the rule of conjunction reduction, proposed by Jacobs and Rosenbaum (1968:256-57) does not delete words. It simply conjoins constituents and the items that have identical reference are deleted by an "identical conjunct reduction transformation"[9].

Koutsaudas (1971) argues that gapping cannot be independent rule of grammar and it must be collapred with CR and should be subsumed under one rule termed "coordinate deletion". They are

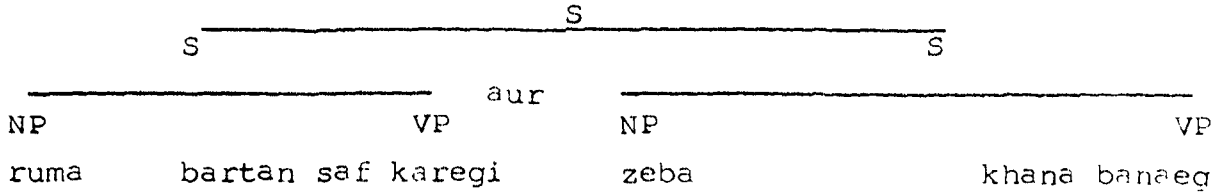
both post cyclic; they both obey DC, and there are no rules which must be ordered in between them.

In view of the above coordinate constructions (I-VII) it seems reasonable to maintain that the process of coordination in Urdu/Hindi, obey DC and the process of coordination is not post cyclic atleast in Urdu/Hindi. It is followed by 'coordinator deletion, case placement and agreement transformations.

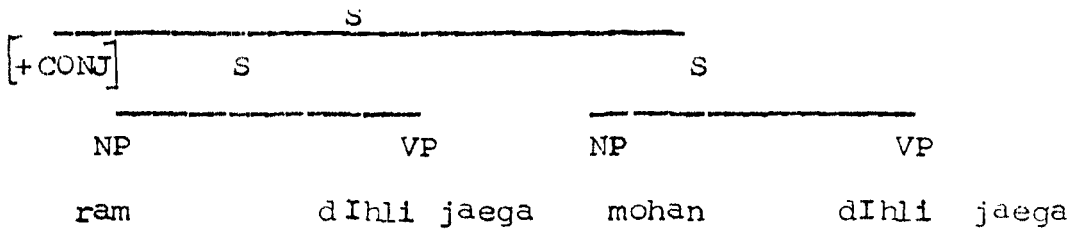
Now we will have to take into account the possible coordinate construction and study how the rules of coordinate conjoining deletion (CCD) operate obeying DC.1. No deletion takes place, where non identical items exist in the clauses which are joined. The deep structure of the sentences such as (23) is as follows :



The rule of coordinate conjoining deletion applies on the above structure. It deletes pre-sentence constituent +CONJ and introduces a coordinator aur between the clauses, the yielded structure would look like the following :

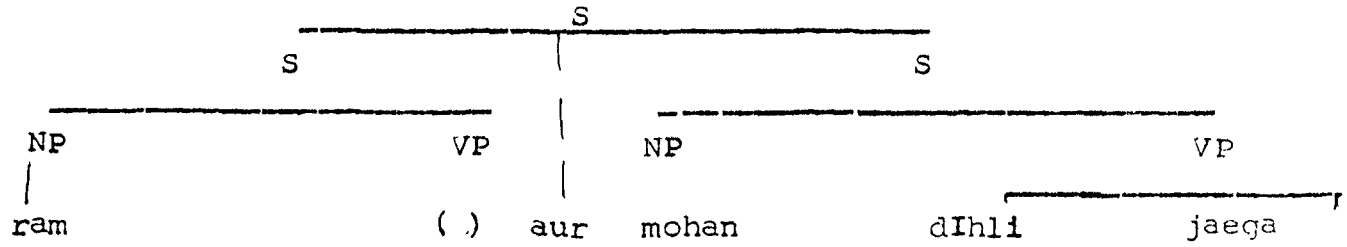


It is noted that where CCD utilizes its complete powers of operation on coordinate structures, it obeys DC. Now the deep structures of such sentences in which deletion takes place backward or in left direction i.e. in first clause/sentence (revrse to the proposal of Kaul and Lester, Mark), if the identical items are on the right branches in the clauses which are conjoined are considered. The deep structure of (25) is as :

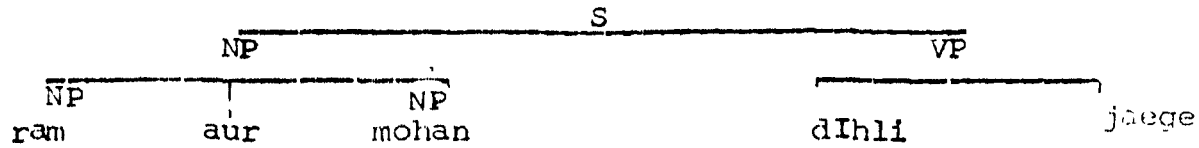


How the rules of CCD deletes the imaginary constituent (+CONJ), introduces the coordinator aur and deletes identical items dehli jaega from first clause simultaneously at a time.

After the application of this rule, the yielded structure is such as :



After the rule of 'Agreement transformation, tree pruning conventions erase non-branching as well as unnecessary nodes and a higher node of the same kind is introduced to yield the surface structure of (25) as below :

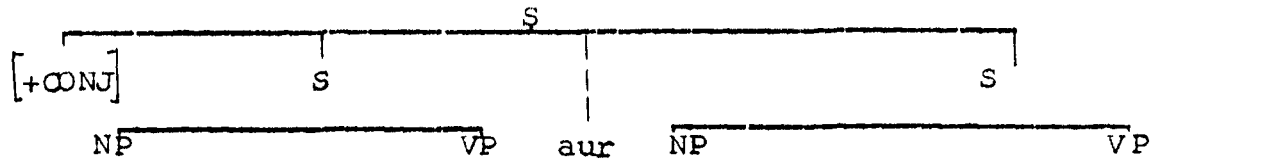


Note : ( ) parenthesis here indicates deleted items.

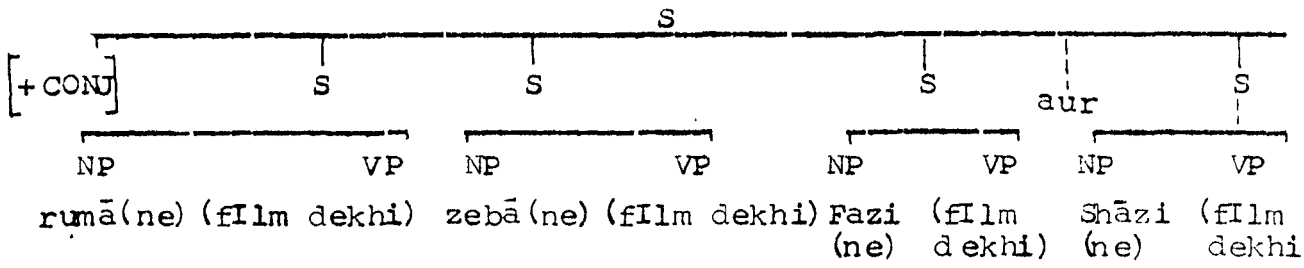
It is argued that deletion operates forward or in right direction i.e. in second clause/sentence (according to Koul and Laster, Mark), if, however, the identical items exist on the left branches in the clauses which are joined.

The surface structures of sentences derived from underlying forms by CCD rules are presented below and deleted elements are kept in brackets. Some considerable possibilities are below :

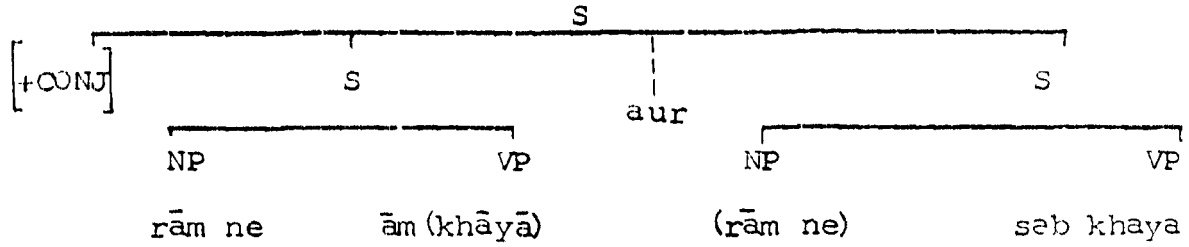
Sentence : 24.



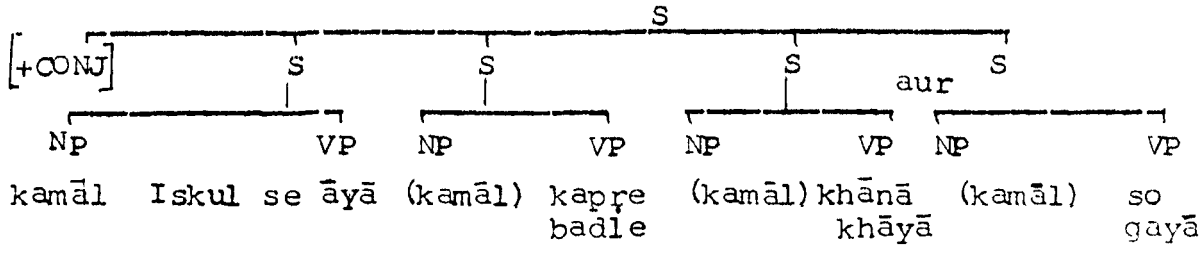
Sentence :26.



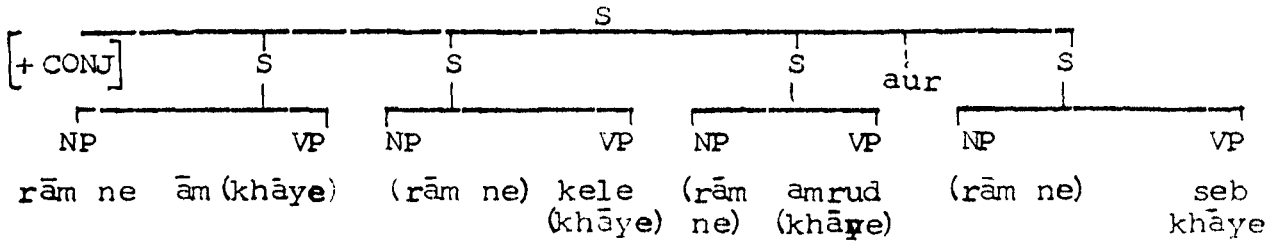
Sentence : 27.



Sentence : 28.



Sentence: 29.



It is noted that a sentence may have any number of conjoined sentences and a rule of CCD operates for reducing only two conjoined sentences and a different one is required for each number of conjoined sentences to be reduced. This however, is not a simple rule but an infinite set of coordinate conjoining deletion rules.

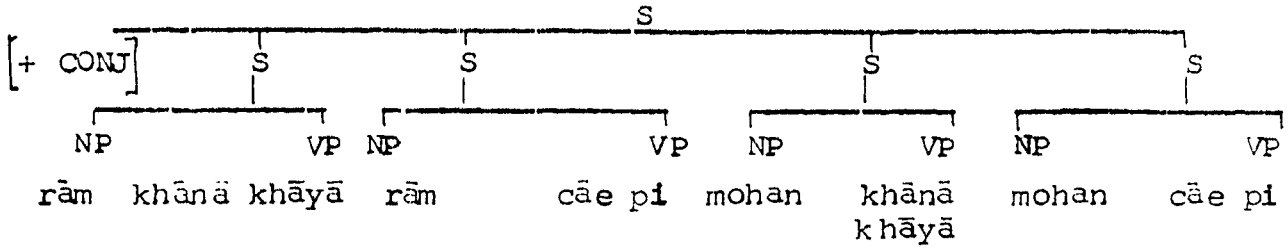
When the two noun phrases and two verb phrases have been conjoined to yield a compound noun and a compound verb phrase, a choice between two distinct deep structures on which the rules operate satisfactorily is available.

The sentence and its deep structures such as the following is noted.

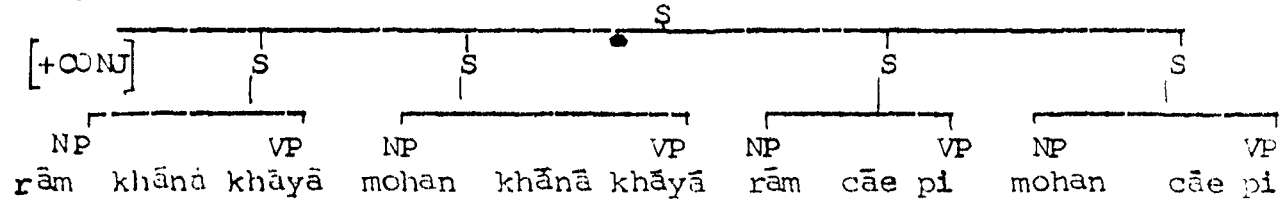
30. ram aur mohan ne khana khaya aur cae pi

'Ram and Mohan took food and drank tea'.

Deep structure one :



Deep structure two :



It is noted that structure one under goes the transformation successively such as :

i. rām khānā khāyā (ram) cae pi mohan khānā khāyā (mohan) cāe pi

ii. rām (khānā khāyā aur cāe pi) aur mohan khānā khāyā aur cāe pi

Structure two has been transformed in the following way :

i. rām (khānā khāyā) mohan khānā khāyā rām (cāe pi) mohan cāe pi

ii. rām aur mohan khānā khāyā aur (rām aur mohan) cāe pi.

To yield the sentence such as (30) the same rules operate differently on distinct deep structures. It is interesting to note that structure one at the final stage of the derivation of surface structure drops a compound verb phrase and the structure two a compound subject noun phrase.

Dey (1975:134) did not notice any contradiction in this type of sentences where (a) drops agentive PP ne and (b) retains it that is identical in both conjoined clauses. The following, sentences are illustrative :[10]

(a) i. gitā (ne) (nāṭek dekhā) suresh ne nāṭak dekhā

ii. gitā aur suresh ne nāṭak dekhā

'Gita and Suresh saw the play'.

(b) i. rām ne ām (khāyā) mohan ne seb khāyā

ii. rām ne ām aur mohan ne seb khāyā

'Ram ate mango and Mohan apple.

Sentences such as given above do not support the proposal of Koutsoudas (1971) and Dey (1975) that the rule of coordination deletion is post cyclic and it must not be ordered after any (case assignment) transformation except concord rule. If it were so,

agentive PP ne in (b.ii) must be deleted after the application of CCD rules. This, however, is not wrong to maintain that the rule of case placement takes place, after the operation of CCD.

Dey's (1975) proposal that coordinator aur is not tolerated in a combination of imperative and declarative is, however, convincing but he gave no indication how this additive marker was deleted, still it does not depend on identity constraint. There is strong evidence with regard to such coordinate sentences (31-33) that the coordinator aur is deleted by an other deletion transformation. The examples that do not involve the coordinator are such as :

31. sohan, mohan, rām sab so gae 'Sohan, Mohan, Ram all slept.
32. lilā shilā, mirā her ek so rahā hai
    Leela, Sheela, Meera each are sleeping'.
33. Idhar āo, maĩ tum ko ām dũgā 'Come here, I will give you mangoes'.

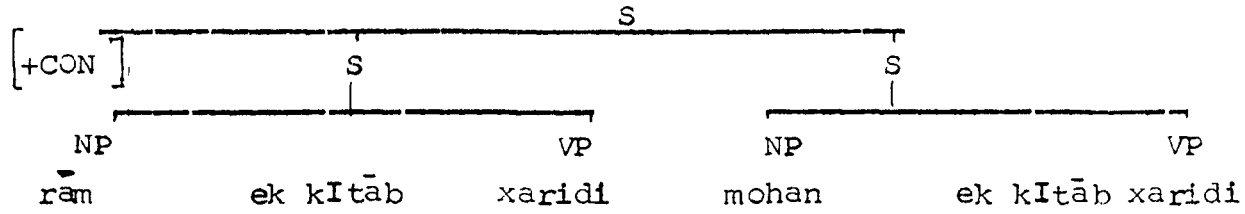
It can be argued that in their whole discussion of coordinate sentences, Jacob and Rosenbaum (1968) did not mention the fact that identical items could be deleted from either clause. They of course maintained a reverse view as compared with other recent studies that the coordinator 'and' originates on the deep structure of the coordinate sentences in English.

It has earlier been pointed out that the rules that yield coordinate sentences are not post cyclic. In this regard one more example is presented to examine the derivational process as well as resultant structure that is not identical to the following :

34. rām aur mohan ne ek ek kItāb xaridi

'Ram and Mohan each purchased a single book'.

The deep structure of the above sentence is as :



By CCD rules identical items such as (ek kItāb xaridi) are deleted from first clause and a coordinate conjunction aur is inserted between rām and mohan, yielding the structure such as :

35. rām (ek kItāb xaridi) aur mohan ek kItāb xaridi

If no transformation is needed, the agreement transformations and case marking rule generate the surface structure as :

rām aur mohan ne ek kItāb xaridi, 'Ram and Mohan purchased a book'.

The meaning conveyed by (35) is vague, it may mean that Ram and Mohan both purchased a single book and not two books.

From an examination of the above discussion, one may be tempted to argue that the CCD rule is blocked and it does not perfectly obey D.C. However, the assumption is not correct and a reasonable assumption that will resolve this controvercy is as follows :

The rule of CCD is not blocked and perfectly obeys DC. Only the determiners (such as ek) that determine the specification of nouns are not deleted by CCD to creat an appropriate structure for the application of "Determiner - Movement" Transformation. Then this rule applies and moves indefinite Det ek to precede object - NP of S2 yielding the sentence such as (35). some other examples are noted below :

36. rām aur mohan ne mi̇ṭhe mi̇ṭhe ām khāye

'Ram and Mohan ate sweet mangoes'.

37. tāzā gosht aur tāzā machli subāh mIlta hai

'Fresh meet and fresh fish is available in the morning

38. usne tāzā gosht aur tāzā machli, xaridi

'He bought fresh meet and fresh fish'.

It is to be mentioned that this contradiction is resolved if we assume that the rules of coordinate deletion are not post cyclic and do not operate on determiners obligatorily, even though they have identical reference.

The order of transformation, therefore, is :

1. CCD transformation
2. Det. Movement transformation
3. Coordinator Deletion rule
4. Agreement transformation
5. Case Assignment rule

It is noted that the sentences for phrases can be conjoined if, however, they are similar in meaning and function.

39. rām ṭihal na aur khelna pasand kartā hai

'Ram likes walking and playing'.

40. rām vahā̃ calā gayā aur mohan yhā̃ ā gayā

'Ram came here and Mohan went there'.

41.* baccā bhuk se aur bārish se terpā

'The child was restless because of hunger and rain'.

There are also cases, where coordinate conjunct express comparison too :

42. sohan paṛhne mẽ sust hai and mohan khelne mẽ tez

'Sohan is lazy in studies and Mohan is smart in playing'.

An appropriate meaning of the sentence is disturbed, if the respective order of the two conjuncts is changed. This may be examined from the following :

43. baccā so gayā aur dudh piyā '

44. bacce ne dudh piyā aur so gayā

In case of synonyms, the conveyed meanings of the sentences are not disturbed :

45. rām ā gayā aur mohan calā gayā 'Ram came and Mohan went'.

46. mohan gayā aur rām ā gayā 'Mohan went and Ram came'.

47. voh ṭāi lagātā hai aur koṭ pIhantā hai 'He uses tie and wears coat'.

It is noted that the compound noun phrase effects agreement rules. In case a masculine and fem. NP are conjoined, the verb shows various concord : In case of subject noun phrases, verb shows masculine plural concord, and in case of object noun phrases, the verb agrees with nearest noun (See Kachru : 1980:147) for details[11];

48. rām aur lilā paṛh rahe haĩ 'Ram and Leela are studying'.

49. maĩ ne ek qalam aur ek pensIl xaridi

'I bought a pen and a pencil'.

Other structures in which the constituents of a sentence are used against their respective order in sentence structure are not discussed for the sake of brevity.

In general, there are two sets of coordinate disjunctive sentence structures possible in Urdu/Hindi :

50.	āp khānā khāẽge ya maĩ cāe banā dũ	'You will eat foor or I may prepare tea'
51.	rām kal yā to āgre yā banāras yā do nõ jagah jāegā	'Ram will go tomorrow either to Agra or Benaras or both places'
52.	kal vahā̃ yā to āp yā mohan zurur pahũc jāẽ	'Tomorrow either you or Mohan must reach there'
53.	āp khānā khaege ya cae piege	'You will take meal or take tea'.
54.	āpko cāe yā kāfi pasand hai	'You like either tea or coffee
55.	yā to rāju yā bablu yā koi aur vahā̃ calā jāe	'Either Raju or Bablu or any other person must reach there'
56.	mirā, lilā, shilā, koi ek Idhar ā jāe	'Meera, Leela, Sheela, any one must come here'
57.	āp cāe piẽge yā kāfi yā dudh.	'You will drink tea or cofee' or milk.
58.	kal yā to mohan aegā yā shyām	'Tomorrow either Mohan will come or Shyam'
59.	voh āgre jāegā, yā dIhli, ya do nõ jagah	'He will go to Agra, or Delhi or both places'.

An examination of the sentences such as 50-56 in (I) shows that they obey D.C. and these are derived by the same C.C.D. Rules that generate coordinate conjuctive sentences. On the other hand, sentences such as 57-59 in (II) do not obey D.C. and the lexical items are deleted by some other deletion rule from second clauses that are identical in the corresponding first clause.

Similarly negative disjunctive sentences have two different sets of structures in Urdu/Hindi:

60.	na yoh yahã̃ ātā hai na maĩ vahã̃ jātā hũ̃	'Neither he comes here nor I go there'.
61.	voh paṛhtā hai na koi kam kartā hai	'He neither reads nor he does some work'.
62.	na rām na shyam, vahã̃ koi bhi nahĩ pahũcā	'Neither Ram nor Shyam, no one reached there'
63.	na to rām ne, na mohan hi ne muje se koi bāt ki	'Neither Ram nor Mohan asked me something'
64.	voh na cāe pasand kartā hai na kāfi	'He likes neither tea nor coffee
65.	vahã̃ na maĩ jā saktā hũ̃ na āp	'Neither I nor you can go there'.
66.	uske pās na daulat hai, na aql, na tālim	'He has neither wealth, nor intelligence, nor education'

Sentence 60-63 in (I) obey directionality constraint and 64-66 in(II) do not obey D.C. and these are derived differently.

Coordinate adversative constructions have a variety of sentence forms in Urdu/Hindi:

67.	mujhe dIhli jānā nahĩ paṛā balkI ram xud hi āgayā	'I did not go to Delhi but Ram himself come'
68.	usne mujhe kai bār bulāyā lekin maĩ nahĩ jā sakā	'He invited me several time but I could not go'
69.	rām nahĩ balkI mohan āyā hai	'Not Ram but Mohan has come'
70.	usne ām nahĩ balkI seb khāe the	'He ate not mangoes but apples'
71.	rām dIhli se nahĩ āgre se áyā hai	'Ram has come not from Delhi but from Agra'

Sentences such as 67-71 show that they obey directionality constraint (DC) and are derived by the same T.rules that derive coordinate conjunctive sentences in Urdu/Hindi.

It was claimed by Kachru (1980) that for the use of balkI or varan, the first conjunct must be in the negative and second in the positive. There are also clauses where first clause is not used in the negative form :

72. rām kyą marā balki uskā pura xāndān hi tabāh hogayā

'Even the whole family of Ram collapsed because of his death'

Limiters can be used freely for emphatic expression in the adversative constructions in Urdu/Hindi. However, these are introduced by transformational rules. These are used in the following sentences :

73. rām hi nahĩ balkI mohan bhi āyā hai
'Not only Ram but also Mohan has come'

74. usne ām hi nahĩ balkI seb bhi khāe
'He ate not only mangoes but also apples'

75. snila, gati hi nahĩ balkI nācti bhi hai
'Sheela not only sings but also dances'

76. rām ne khānā hi nahĩ khāyā balkI dudh bhi piyā
'Ram ate not only food but also drank milk'.

NOTES AND REFERENCES :

1. Kachru (1980:44). 'Aspects of Hindi Grammar.

2. For discussion of such claim the following works are considerable: Jacobs and Rosenbaum (1968:259), 'English Transformational Grammar and Kaul, O.N. (1974:14-30). 'Coordinate conjunction in Hindi' : Indian Linguistics 35.

3. Dey, Pradip (1975:138). 'Rejected Kouls' claim of synonymy in 'A note on coordinate conjunction in Hindi'.

4. Dey (1974:139). 'A note on coordinate conjunction in Hindi.

5. Koul (1974:14). 'Coordinate conjunction in Hindi'.

   However, Dey (1975:133).'Proposes the structure such as (III) and (IV) (given in the present study) and argues that deletion occurs in non final sentences'.

6. Koul (1974) and Lester, Mark (1971). 'Introductory Transformational Grammar of English'.

7. Ross, J.R. (1967 a:5). 'Gapping and the order of the constituents'.

8. Koutsoudas, A. (1971:337). 'Gapping, conjunction reduction and coordinate deletion.

9. Jacobs and Rosenbaum (1968). 'English Transformational Grammar'.

10. Dey (1974:134). 'A note on coordinate conjunction in Hindi'.

11. Kachru (1980:147).'has presented a detailed account on verbal agreement in 'Aspects of Hindi Grammar'.

CHAPTER-IX

COMPARATIVE CONSTRUCTIONS

The claim that the comparative sentences in Urdu/Hindi and even in English are generated through the process of embedding is controvercial. Mrs. Kachru (1968), in her analysis of Hindi and R.B. Lees (1960) and Koutsouddas (1966), in their treatment of English, derive such constructions through the process of embedding. It has been suggested that the 'sentences with adjectives in the comparative degree are derived through embedding. Kout Soudas (1966 : 324)[1]. On the other hand, C.S. Smith (1961), Lester, Mark (1971) and Jacobs and Rosenbaum (1968)[2] held the view that the comparative sentences could be derived through the process of 'Adjunction or Conjoining'.[2]

According to Mrs. Machru (1980)[3], in her treatment of comparative constructions in Hindi, the object of comparision occurs as the subject and the thing compared occurs with the past position se. It is followed by the objective with regard to which the objects are compared, e.g.

(1) sumit rahul se baṛā hai

'Sumit is bigger than Rahul'.

The whole phrase rahul se baṛā is treated as the complement of ho 'be' and can be used attributively:

(2) rahul se baṛe laṛke udhar khel rahe hai

'The boys bigger than Rahul are playing over there.

She further states that the following sentence is said to be a complex clausal construction:

(3) rām jItna cālāk hai mohan utnāi murkh hai

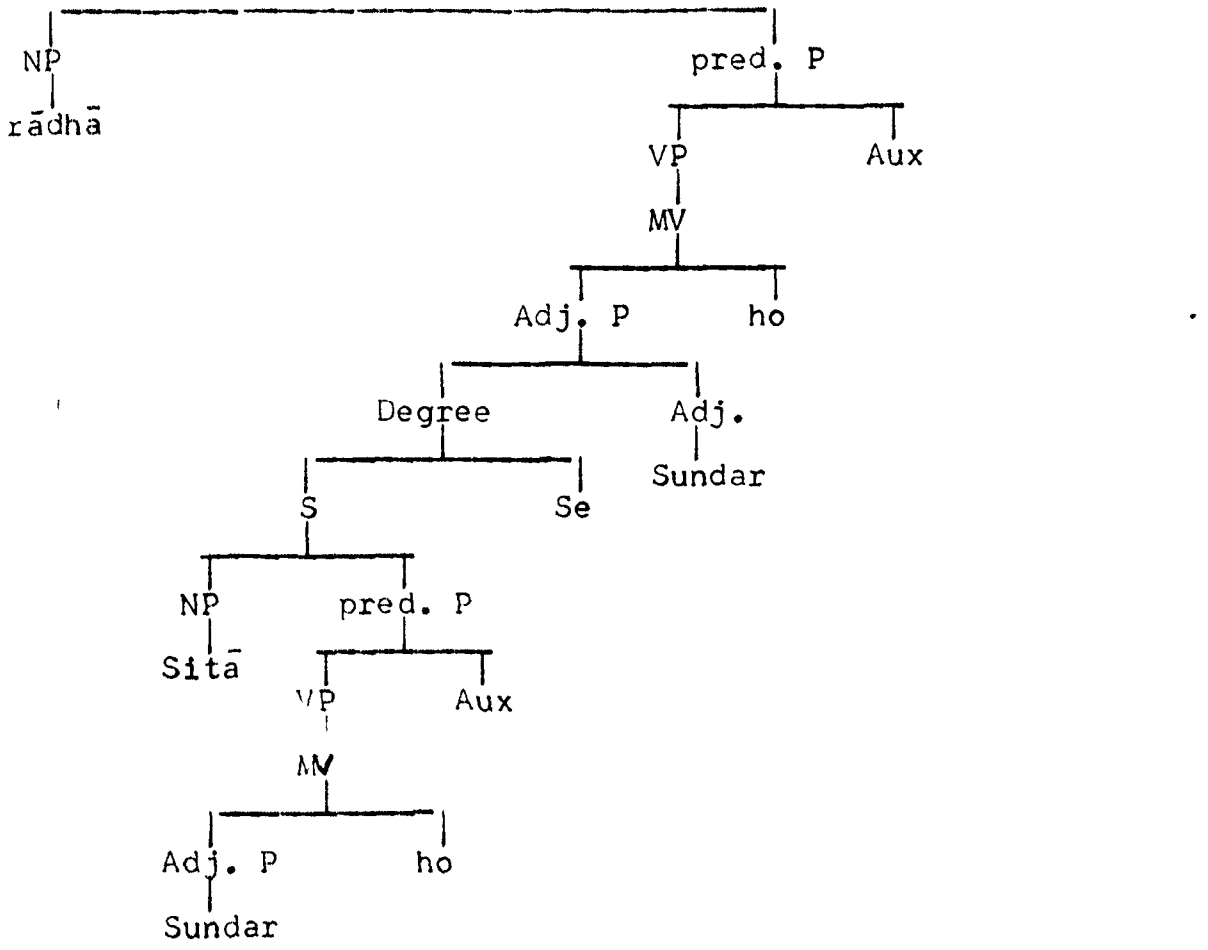
'Mohan is as foolish as Ram is clever'.

Prof, Kachru in 1968, derives comparative constructions in Hindi, through the process of embedding.[4] She further points out that the sentences containing NPs with comparative and superlative adjectives are derived similarly. In support of her claim she gives an example such as below:

(4) rādhā site se sundar hai

'Radha is more beautiful than Sita'.

The underlying structure of (4) proposed by her is as (A):



An examination of the structure such as (A) reveals the fact that the sentences such as (4) are derived through embedding. The embedded S in the above structure is seen to occure under the immediate domination of an adjectival phrase. This assumption is probably false. Because the generative grammer produces no such provision by which a sentence could be embedded directly under immediate domination of an AP. It is an approach with which many major transformational grammarians disagree. It has been discussed in detail (in part three) that the embedded S can be immediately dominated by either an NP or a VP.

In the present study an attempt will be made to state that the conparative sentences in Urdu/Hindi might be governed through conjoining process that might be termed here as the process of 'comparision'. Notice that the constructions of the sort under discussion generated by the process of comparision, constitute a conjoined sentence or a phrase.

In Urdu/Hindi, generally a two way distinction is made in terms of comparision: Comparative and superlative. We mention below the examples of each:

COMPARATIVE:

(5) rām mohan se chotā hai

'Ram is younger than Mohan'

SUPERLATIVE:

(6) rām sab se chotā hai

'Ram is youngest of all'.

(7) rām sab laṛkõ se choṭā hai

'Ram is youngest of all the boys'.

In 5, the objects are compared with regard to an identical quality though it is distinct in degrees. In superlative constructions such as in 6, the object compared to is sab all, and in 7, sab is used as determiner.

In such sentences mostly all the gradable adjectives and a few adverbs are used predicatively as constituent of VP. Both the comparative and superlative constructions are derived by a similar basis.

The comparative sentences in Urdu/Hindi are derived from two in dependent sentences joined together with the joining items that fall into two categories:

(a) se 'than' is an important comparative joining item or conjunction. Other comparative conjunctions that may be used in place of se are such as ke muqāble mẽ/ ba muqāble .... ke, ki apekṣā, ki tulnā mẽ, ke banIsbat/ banIsbat .... ke, ke manīnd, jaisa, sa etc., all meaning 'compared to'.

(b) paired items such as aisā .... jaisā, Itnā/Utnā ..... JItnā, Jaisā .... vaisā 'as .... as' are used to express qualities.

The limiters such as hi and bhi may also be used with the conjunctions such as in (b), e.g. aisā hi, Itnāhi, Utnā hi, Itnā bhi 'as, so' etc.

In comparision, to indicate 'more or less grades in adjectives, the items such as zyada 'more' or kam 'less' are used:

(8) rām shyām se zyādā hoshyār hai
'Ram is more intelegent than Shyam'.

(9) lilā shīlā se kam sundar hai
'Lila is less beautiful than Sita'.

(10) mohan bannīsbat rām ke zyādā cālāk hai
'Mohan is more clever than Ram'.

In case the comparing objects are equal, the items such as Jaisa or sa are used:

(11) maĩ ne ap jaisā jhuṭā ādmi aj tak nahĩ dekha
'I did not see a man as lier as you'

(12) latā hindi jaisi āsān zabān na sikh saki
'Lata could not learn the language as easy as Hindi'

(13) ramā ko latā si ek bhi laṛki dikhāi nahĩ di
'Rama saw not a single girl like Lata'

It is, however, not necessary to use the adjectives in every comparative construction:

(14) nehru jaisā netā ab bharat mẽ paidā na hogā
'India can not produce a leader like Nehru again'

It can be argued that sentences such as 11-14 are derived through the process of embedding. There are, however, cases where objects are compared with regard to two distinct qualities:

(15) rām utnā hi sidhā hai jītnā mohan terhā

'Ram is as gentle as Mohan is ungentle'.

(16) rām jItnā sidhā hai mohan utnā hi cālāk hai

'Mohan is as clever as Ram is gentle'.

Objects may also be compared with regard to an identical quality:

(17) rām Itnā hi lambā hai jItnā mohan

'Ram is as long as Mohan'

(18) lila jItni moṭi hai utni hi kabhi latā thi

'An object may be compare to itself in terms of its two distinct qualities:

(19) shyām jītna lambā hai utnā hi bevaquf hai

'Shyam is as foolish as he is long'

(20) rāj jītnā ɣarib hai utnā hi imāndār hai

'Raj is as honest as he is poor'.

Adverbs, in order to indicate place, time and manner expression may participate in comparative constructions:

(21) āgre ke muqāble mẽ aligarh dIhli ke pās hai

'Aligarh is closer than Agra to Delhi'

(22) aligarh se āgrā dIhli se dur hai

Agra is more away than Aligarh from Delhi'.

(23) lilā shilā se pahle Iskul cali gai

'Lila went to school earlier than Shila'

(24) rāju se zyādā rāmu ne sharāfat se bāt ki

'Ramu talked more politely than Raju did'.

Sentences 21-22, refer to place 23, time and 24, manner expression.

Adverbs may be used, even in superlative constructions:

(25) faridabad dIhli ke sab se qarib hai

'Faridabad is closest to Delhi'

(26) meri kār dIhli sab se pahle pahũci

'My car arrived at Delhi earliest of all'.

(27) rām ne sab se zyàdā hoshyari se kàm kiya

'Ram worked more carefully'

It is noted that the adjectives used with the adverbs such as in 24 and 27, are said to function as adverbs that modify the adverbs.

It should also be noticed that the constructions derived as such, if could be divided easily into two separate clauses, they constitute a conjoined sentence that might be specified as a comparative sentence. On the other hand if they are invisible in clauses, they constitute a comparative phrase. e.g.

(28) latā ramā̃ se moṭi hai

'Lata is fatter than Rama'

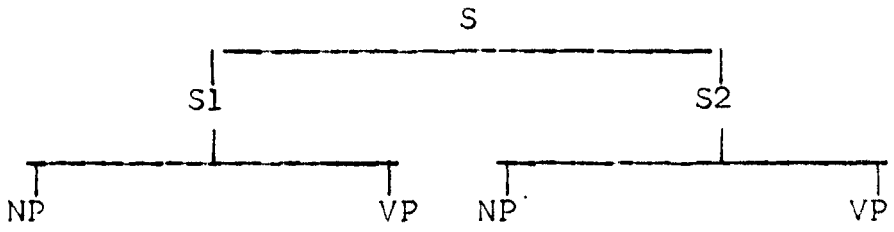
(29) ritā jItni hoshyār hai rāju utnā hi murkh hai

'Raju is as foolish as Ritu is clever'.

In 28, rama se moṭi is used as conjoined phrase

in order to indicate the comparision. Sentence 29, is best treated as conjoined sentence because it contains two full clauses.

The underlying representation of a comparative construction according to the new proposal is such as the following:



The process of comparision thus involves the following set of operations:

(1) Comparative joining item insertion transformation.

(2) Duplicate Deletion transformation.

(3) Preposing or fronting transformation.

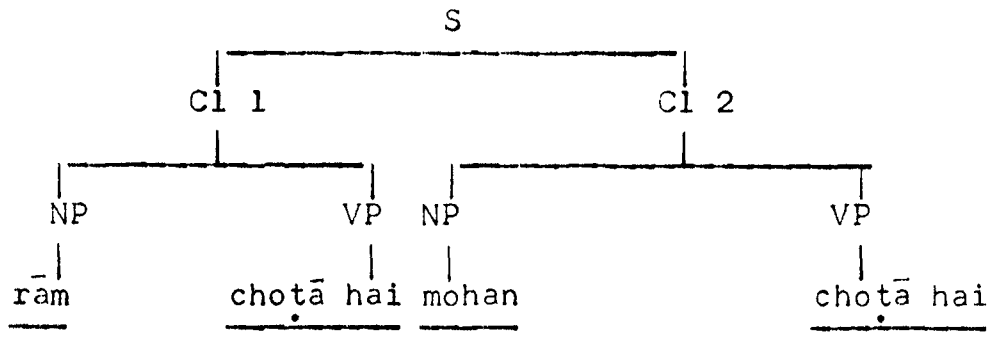
Conjunction insertion transformation is an obligetory transformation which attaches the conjunction such as in (a) to the subject of clause 2. In case of paired items such as in (b), the insertion takes place in both the clauses of the sentence at proper places.

Duplicate Deletion transformation deletes the identical item optionally from either clause. The identical items from clause 2 are deleted, if the paired items such as in (b) are used. The deletion takes place on first clause, if the non paired items such as in (a) are inserted. Notice that the

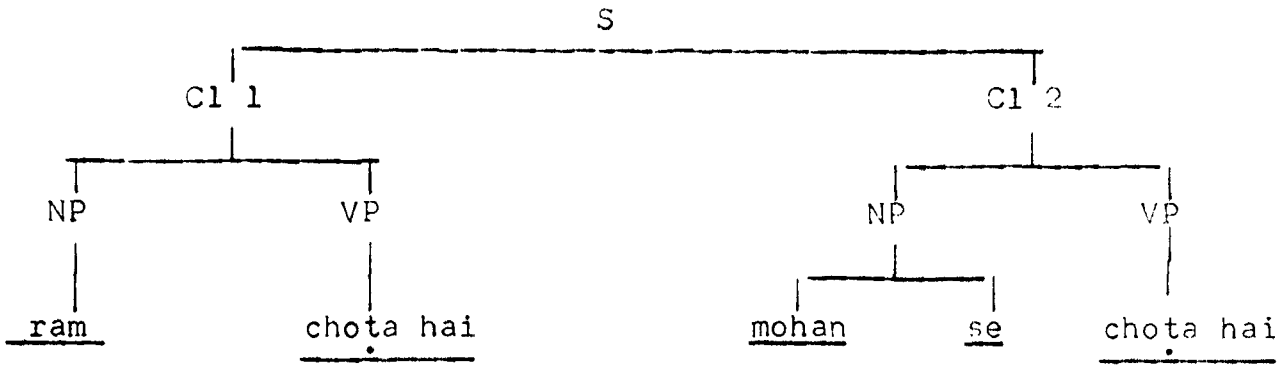
Duplicate Deletion rule does not operate, in case the items in both the clauses are not identical.

Preposing rule is an optional rule. It moves the subject of the second clause and conjunction attached with it, to the front of the sentence.

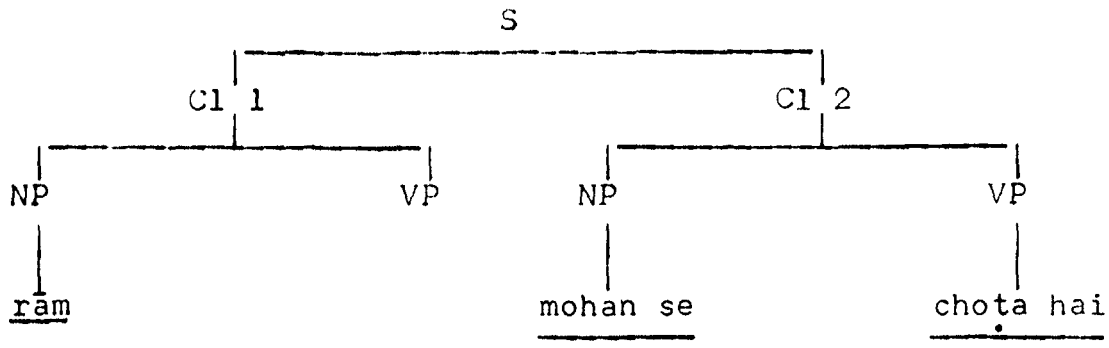
It seems reasonable to present a step by step derivation of a comparative sentence based on the approach that has already been proposed above. The underlying structure of the sentences such as (5) is as follows:



Comparative joining items insertion rule applies, in order to insert the conjunction se 'than' after mohan, the subject of Cl 2. The yielding structure after this transformation looks on follows:



In the second step, the identical items are deleted from first clause, that are duplicate of second clause by applying'Duplicate Deletion rule':



After tree pruning and relevant phonogocial rule, we obtain the surface form of sentence (5).

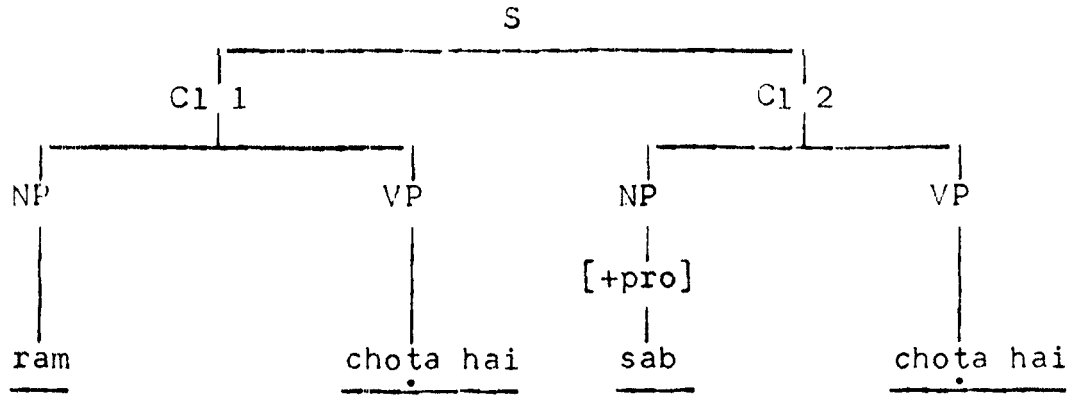
In case of sentence such as the following:

(30) mohan se ram chota hai

'Ram is younger than Mohan'

The preposing or fronting rule applies, in order to move mohan se i.e. the subject of clause 2 and comparative conjunction, to the front of the sentence to obtain the final form of (30).

However, the deep structure of a superlative construction is such as (6):

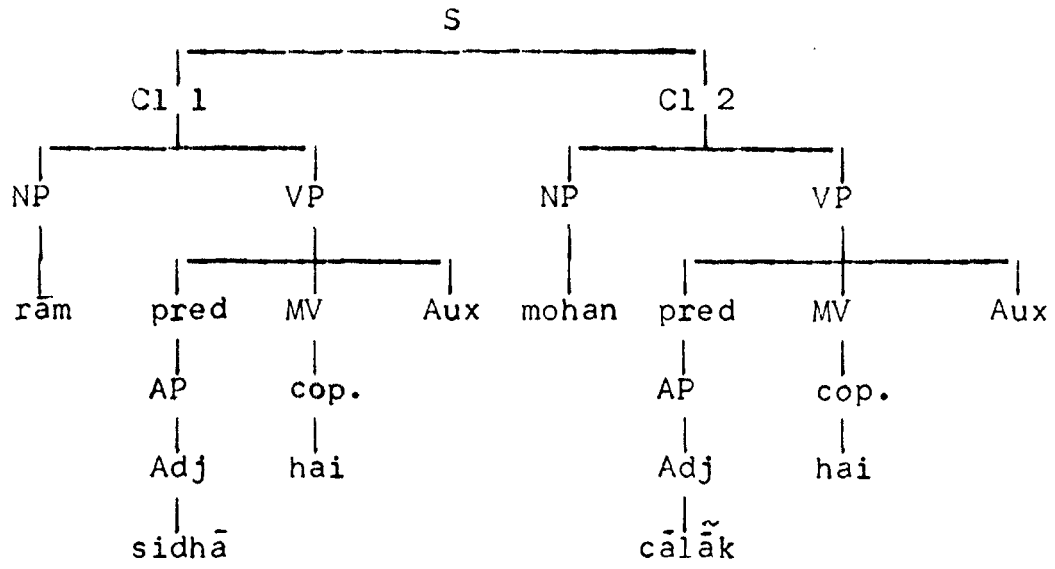


The structure of a sentence such as (6) is derived by the same 'comparative conjunction' and Duplicate Deletion rules that derive the sentence such as (5).

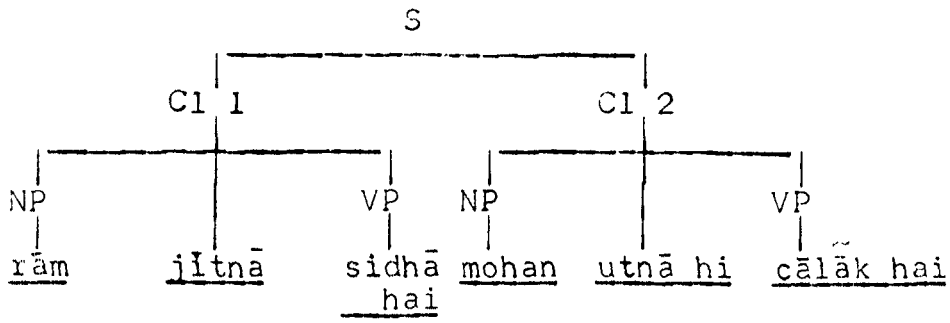
The sentence that allow comparative joining item in its first clause and its correlative in the second clause, are considered.

The underlying tree representation of sentence 16-19 are as follows:

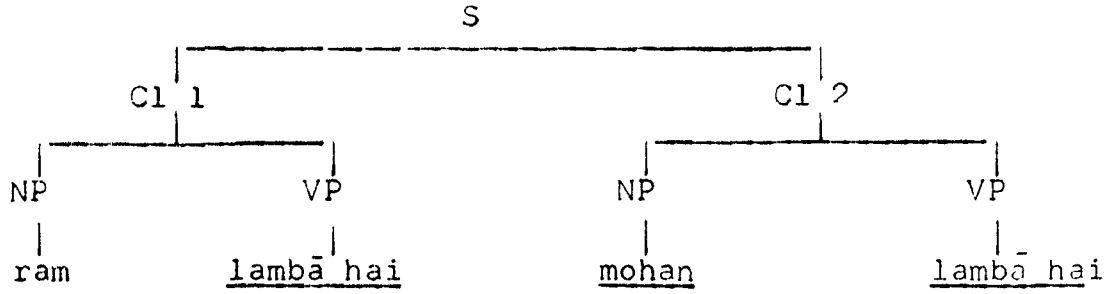
(B) Sentence 16



Comparative joining item insertion rule applies to introduce jitna ..... utnahi in the deep structure. After comparative joining item insertion transformation we derive:

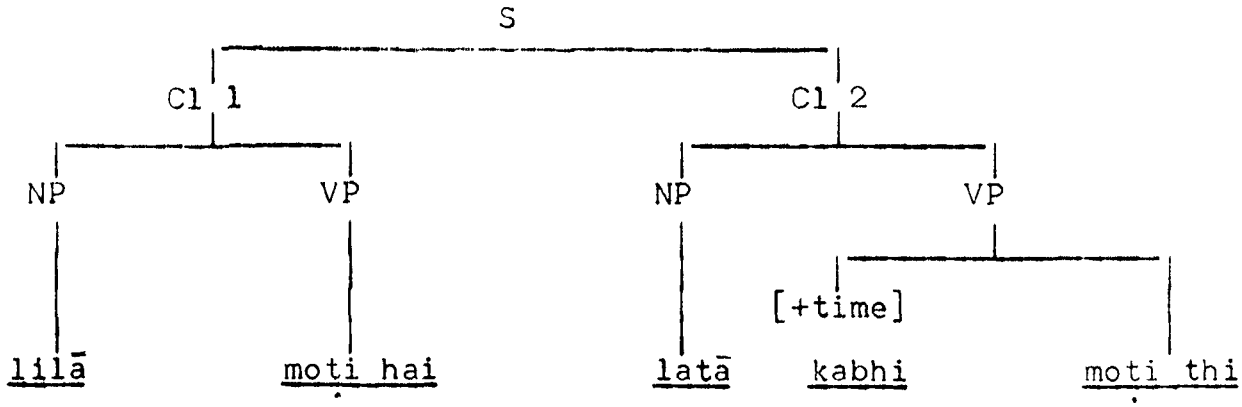


(C) Sentence 17



Comparative conjunction insertion rule applies to insert. It nahi in first clause and jītna in second clause and Duplicate Deletion rule applies and deletes the second occurrance of identical VP lamba hai of clause 2, yielding the structure such as 17.

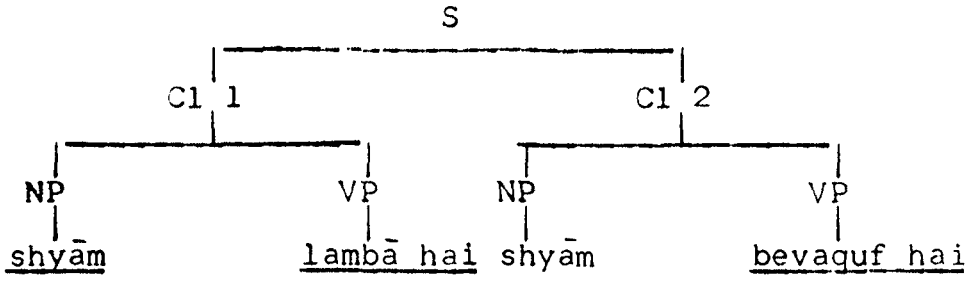
(D) Sentence 18



By conjunction insertion rule, jītna ..... utnā are introduced. By Duplicate Deletion rule, the identical moti is deleted from second clause. Thelimiter transformation introduces bhi to the right of latā and after Agreement transformation we obtain the structure such as 18.

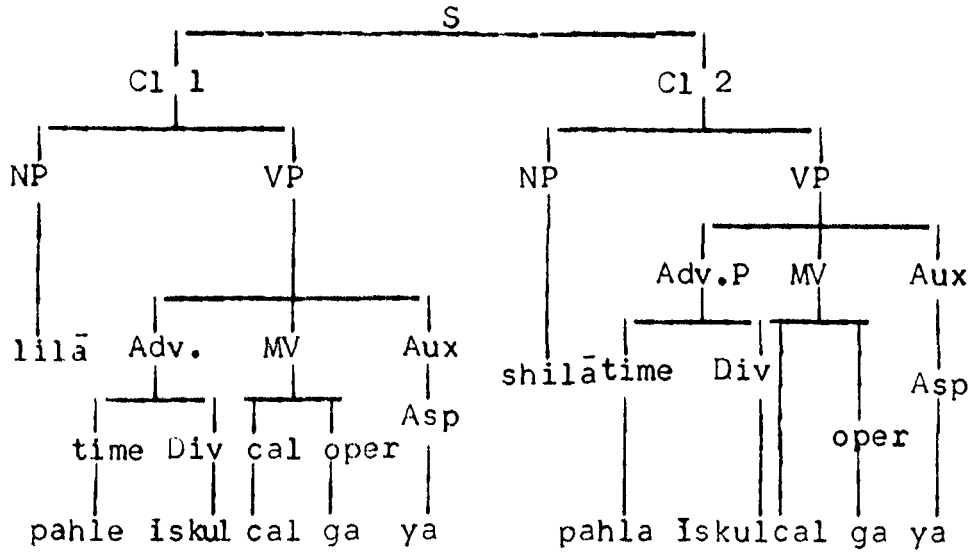
It is noted that the paired conjunction and adjectives agree in gender number with the subject of both the clauses. Since limitars are not part of conjunctions they are introduced by Transformational Rules.

(E) Sentence 19



By comparative joining conjunction rule, the item jītnā .... utnā hi are introduced in both the clauses. In the second step, the identical occurrence of Shyām is deleted from second clause. If no transformation is needed, the sentence 19 results.

It has been discussed above that the adverbs may also be used in order to indicate the comparision in the sentences. The instance of (23) with the following underlying structure is as:



Comparative conjunction insertion rule introduces conjunction se to the right of Shilā and Duplicate Deletion rule deletes the second occurrence of identical VP of clause first yielding the structure (23).

There are, however, other consturctions that seem to be indicative in various expression of comparision, though they are not derived by the same process of comparision. These are the instances such as the following:

(31) ram chota hai aur mohan bara

'Ram is young and Mohan is big'.

(32) ram chota hai jabkī mohan bara

Ram is young while Mohan is big

(33) sohan māldār hote hue bhi beimān hai

'Sohan is dishonest though he is wealthy'.

This preliminary discussion presents only a guide line to a researcher. As the topic is beyond the scope of detailed discussion, it does not cover all the problemes involved in a comparative consturctions. It requires further investigations and a separate research.

NOTES AND REFERENCES

1. For detailed account the following works are notable: Kachru, Y. (1968 : 52) 'Studies in a Transformational Gr. of Hindi', Lees, R.B. (1960)'The Gr. of English Nominilization', Lees, R.B. (1961) 'The Grametical Analysis of the English comparative construction'. Word, XVII, 171-85 and Koutsoudas (1966 : 324) 'Writing Transformational Gr'.

2. Other works that are in favour of conjoining process are as C.S. Smith (1961) 'A class of complex modifiers in Eng'. Language, XXXVII, 342-365, Lester, Mark (1971 : 282) 'Introductory transformational Gr. of English' and Jacobs and Rosanbaun (1968 : 232) 'English Transformational Gr'.

3. Kachru (1980 : 74-76) 'Aspects of Hindi Gr.

4. Kachru (1968 : 52) 'Studies in a Transformational Gr. of Hindi.

SUMMARY AND CONCLUSION

The preceding chapters in this work are organised to describe the structure of simple, complex and compound sentences in Urdu/Hindi. First two chapters have dealt with the structure of the simple sentence with reference to noun phrase and verb phrase. The phrase structure possibilities for noun phrases in Urdu/Hindi, discussed in chapter one are summarized by the following rules :

$$NP \longrightarrow \left\{ \begin{array}{c} (Det) + (S) + N \\ S + NP \end{array} \right\}$$

The lower line of the rule indicates that a noun phrase contains a nominalized sentence and the upper line indicates that a noun phrase contains a noun only, a determiner and a noun and modifying sentence. A three way distruction has been set up in terms of determiner in Urdu/Hindi.

In addition, the nouns have been subcategorized in terms of feature analysis. Pronouns have been set up as special type of nouns dominated by NP node in deep structure. Various case forms of nouns and pronouns have been discussed and introduced into the intermediate structure by "Case assignment rules".

Similarly, in chapter two, the PS rules that generate the deep structure of the verb phrase in terms of P-terminal symbols are illustrated below :

$$VP \longrightarrow (Adv.) + (Comp) + MV + Aux$$

The complement as well as auxiliary have been further developed into cooccuring categories by some other expansion rules. Verbs in Urdu/Hindi have been sub-categorized in terms of their inherient

properties. On the basis of formal ground these fall into three basic sets : Simple, complex and compound. The participle, mood and agreement markers have been introduced into the structure of a verb phrase by transformational rules. Thus, a simple sentence in terms of a noun phrase and verb phrase have been generated by the above rules.

Chapter three has dealt with phrasal as well as sentential modifiers through the process of noun modification. A Relative clause has been discussed to occupy any of three positions : sentence initial, medial and final. RR clauses rarely occur with proper nouns because proper nouns usually indicate unique reference. RR clauses with indefinite determiner do not occur in sentence initial and medial position. Modifiers have two forms : NP + modifier and modifier + NP. Participials, adjectives and possessive phrases contain the forms as pre-NP modifier. Noun in apposition indicates non-restrictive reference and contains both, pre and post-NP modifier forms.

In Chapter Four, Nominal complements have been generated into phrases and clauses by two distinct sets of rules. Infinitival and sentential complements are derived by Nominalization transformation. For abstract nominals, 'Abstract nominalization transformation is made to operate in this regard. Other phrasal complements such as adjectives, participles and noun phrases are derived by the process of 'Subject raising'. It has been observed that the status of participles as NP-complement is doubtful and creates disputed problems.

Chapter five concentrates on direct and indirect causal constructions. These are derived through embedding via "Predicate raising rule" rather than straight forward process. The proposed status of causal constructions is as special type of NP-complement rather than VP-complement. The possessive reflexive phrase such as apne kapre 'his clothes' in sentence (20) is ambiguous and creates disputable problems. The rule of "Predicate raising is unique and can operate recursively before Lexicalization.

Chapter Six has given a detailed account of VP-complementation in terms of participles, adjectives and noun phrases. VP-complement has been proposed as an optional expansion of a verb phrase of another sentence. Sentences which occur directly under immediate dominations of VP node rather than under some other phrase such as PP, Postp or Adv_P yield verb phrase complements. On the other hand, the conditions for verbal complementation rules have been proposed that the subject of the embedded sentence must be identical to the object of the matrix sentence.

Chapter seven has dealt with the problems of 'Adverbialization' It has been proposed in this study that the sentences embedded under immediate domination of adverbial phrase of higher sentence yield participles in case the subjects of both, higher and lower sentences are identical. On the other hand, embedded sentences yield full clauses i.e. adverbial clauses, if both the dominated and dominating sentences do not depend on the condition of subject identity. Participials and adverbial clauses have been generated by two different

sets of rules. Participials are derived by the 'Adverbialization transformation' and clauses by 'Subordinating Adverb Insertion rule'.

Part three presented the analysis of compound sentences with reference to the structure of coordinate and comparative constructions. It has been examined in chapter eight that the coordinate structures in Urdu/Hindi obey Directionality constraint (D.C.) proposed by Ross (1965). Compound phrases as well as clauses have been discussed in this study with reference to the structure of conjunctive, disjunctive and adversative sentences. It has also been proposed that the sentences joined together with the coordinating conjunction are of grammatically equal or coordinate rank. There are also some structures which do not obey D.C. and that are derived by some other different rules.

In Chapter nine, the process of comparision which has dealt with the comparative and superlative degrees generates phrases as well as full clauses where-as two clauses are joined together with a comparative joining item. However, not all the examples presented in this chapter are derived through the process of conjoining. Both, adjectives and adverbs have been analysed expressing comparision with reference to comparative and superlative degrees.

CONCLUSION :

This study has two goals : It provides a survey of clause types of Urdu/Hindi from a transformational point of view.

Secondly, it provides a set of rules which can be applied to generate simple, complex and compound sentences. It also attempts

to present the underlying structures and surface structures which are transformationally related to each other.

The first part of the study is not directly concerned with topic of research, but it provides the necessary basis for analysing the language. The second and third parts of this work constitute the main study and analysis about generation of infinite number of sentences containing phrases and clauses.

Since the scope of this study is limited other areas have not been touched. However, it is not out of place to mention that although Hindi/Urdu clause constructions have much in common, but since these two languages have developed differently in their historical evolution being influenced by either Persian (in the case of Urdu) and Sanskrit (in the case of Hindi) both the languages show certain differences as to their grammatical structure. This has been particularly noted in the present work.

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